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The manual provides major topics, objectives, activities and, procedures, references and materials, and assignments for the training program. The topics covered are hospital organization and community role, organization and management of a medical records department, international classification of diseases and operations, medical terminology, legal aspects, standards, education and training, and data processing. (The Instructor's Guide for the training program is available as LI 003097). (AB)

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COURSE OF STUDY

MEDICAL RECORD CLERK TRAINING PROGRAM

STUDENT MANUAL

For Medical Record Personnel
in Small Rural Hospitals in Colorado

September 1971

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INTRODUCTION

OBJECTIVES OF THE TRAINING PROGRAM FOR MEDICAL RECORD CLERKS

The purpose of the training program for medical record clerks is to impart basic knowledge to and develop the skills of medical record personnel who work in small rural hospitals so that they may better perform the technical tasks associated with the maintenance and custody of medical records. A second purpose of the program is to develop an attitude in trained medical record clerks which will lead to more constructive relationships with the medical staff and administrators.

Hospital. Specific training goals for the clerk in the understanding of the basic principles of hospital organization are:

1. To understand the structure, functions, and interdepartmental relationships of hospital organization.

2. To know the standards and requirements of inspecting, certifying, and accrediting bodies and agencies.

Medical Record Department. The specific training goals for the clerk in understanding the functions of the medical record department are:

1. To understand the basic principles of organization and management of a medical record department.

2. To understand the component parts of a medical record--content of medical records and forms.

3. To evaluate quantitatively a medical record for completeness, consistency of information and accuracy, and the discharge analysis.

4. To understand basic medical terminology and anatomy to facilitate transcription of medical dictation.

5. To code diagnoses and operations according to SNDO and ICDA.

6. To organize and maintain all necessary indices including diseases, operations, physicians, and patients.

7. To use systems of identification, numbering, and filing to insure prompt location of a patient's medical record.

8. To understand how to develop meaningful hospital statistics.

9. To perform secretarial duties, including correspondence, committee meeting minutes, reports, and memoranda.

10. To know medico-legal aspects of medical records.

Personal Knowledge. The specific training goals for the clerk are:

1. To practice good interpersonal relationships with physicians and other hospital personnel.

2. To seek continuous educational training in medical record library science.

TOPICAL OUTLINE OF TRAINING PROGRAM FOR MEDICAL RECORD CLERKS

I. Hospital Organization and Community Role--2 Hours

- A. Health as a Community Affair
- B. Internal Hospital Organization

II. Organization and Management of a Medical Record Department--9 Hours

- A. Hospital Organization and Management
- B. Medical Record Department
- C. Tour of Medical Record Department
- D. Secretarial Services

III. Basic Filing Systems--2 Hours

- A. Filing Arrangement
- B. Four Required Indices Maintained in Medical Record Department
- C. Patient Index
- D. Method of Filing of Medical Record Folder

IV. International Classification of Diseases and Operations--16 Hours

- A. What is ICDA?
- B. Content of Code Book, Volume I
- C. Coding Problems
- D. Coding Problems on Operations

V. Standard Nomenclature of Diseases and Operations--16 Hours

- A. Purposes for Using a Disease and Operation Nomenclature
- B. Dual System of Coding
- C. Derivation of Code Numbers
- D. Supplementary Terms
- E. Presentation of Examples and Exercises

VI. Medical Terminology--18 Hours

- A. Word Building
- B. Drill Using Programmed Text
- C. Classroom Drills and Reviews

VII. Basic Human Anatomy--8 Hours

A. Introduction
B. Regions and Landmarks of the Body
C. The Brain
D. The Heart
E. Circulation
F. Tracheobronchial Tree
G. Gastrointestinal Tract
H. The Spleen
I. Kidneys
J. Endocrine Glands
K. Pelvis
L. Lymphatic System
M. Blood

VIII. Content of Medical Records--14 Hours

A. Requirements and Content of Each Type of Record
B. Special Records
C. Content of Medical Records

IX. Discharge Analysis--4 Hours

A. Daily Analysis of Hospital Service
B. Content of Medical Records
C. Practical Exercises

X. Hospital Statistics--11 Hours

A. What Are They?
B. How Are They Gathered?
C. What Information Is Needed by Whom?
D. Analysis of Hospital Service
E. Computations

XI. Ethics for Medical Records Personnel--1 Hour

A. Medical Record Librarian as a Profession
B. Code of Ethics
C. Role Playing

XII. Legal Aspects of Medical Records--2 Hours

A. Legal Aspects
B. Definitions
C. Purpose
D. Areas of Law to Be Considered

XIII. Standards and Requirements of State, Medicare, and Joint Commission--6 Hours

- A. Certification and State Licensure
- B. Medicare Survey
- C. Physician's Responsibility for Good Medical Records
- D. Joint Commission on the Accreditation of Hospitals

XIV. Education and Training--1 Hour

- A. Changing Pattern of Medical Care
- B. Educational Opportunities for Medical Record Librarians
- C. Membership in American Association of Medical Record Librarians

XV. Data Processing--1 Hour

- A. Punched Card Accounting
- B. Need for Common Language in Medical Records

HOSPITAL ORGANIZATION AND COMMUNITY ROLE

HOSPITAL ORGANIZATION AND COMMUNITY ROLE

I. Topic: Hospital Organization and Community Role.

II. Objectives:

A. To orient the student to the nature and organization of the hospital.

B. To orient the student to the role of the hospital in the community.

III. Activities and Procedures: Lecture.

IV. Materials and Bibliography:

Tapes of lectures available.

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962.

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National Commission on Community Health Services, Comprehensive Health Care, A Challenge to American Communities, Public Affairs Press, Washington, D.C., 1967.

National Commission on Community Health Services, Health Is a Community Affair, Harvard University Press, Cambrdige, 1966.

V. Assignments: None.

HEALTH AS A COMMUNITY AFFAIR

I. What is a health care system?

   A. A process which a person goes through to take care of health problems, e.g., seeing a doctor or a dentist.

   B. A process which provides for people not seeking it, e.g., fluoridation of water, air pollution control.

   C. In the care system are all kinds of hospitals, e.g., private, government.

      1. All have different rules for physicians to follow.

      2. There are great differences in small town hospital and large city clinic.

   D. System provides educational opportunities for the growing number of health workers and professionals.

II. Health care system is complex.

   A. Six basic areas are:

      1. Doctors

      2. Ambulance service

      3. Preventive medicine

      4. Manpower

      5. Facilities

      6. Services

   B. A system is a set or arrangement of things so related as to form a unified or organic whole.

   C. Education of health manpower is related to services, and services are related to facilities.

      1. It is not a one-to-one relationship, but one of complex relationships.

      2. As a system, the separate units have great potential.

3. Careful planning is required to insure that the system will operate.

4. A community hospital could provide the leadership needed to make the system work in a given geographic area.

III. Community hospital.

A. Could provide the leadership to make health care a community affair.

B. This is because the hospital is the hub of the community health care wheel.

C. The other parts of the system make up the spokes of the wheel so all must be operating for the system to work.

D. In addition to providing care for patients, the community hospital should have a comprehensive health care program for the community it serves.

1. New methods of financing health care are helping hospitals service communities, e.g., home health service and extended care outside of hospital.

2. Boards of directors are made up of people with only limited interest (political or social) in problem; hence, they are poorly informed about the changing role of the hospital.

3. Role of the hospital board is changing. It should look for new ways for the hospital to serve the community. It should be a social architect for the future of the hospital.

IV. A comprehensive program would guarantee the services of specialists and range beyond a single illness, and would include preventive care, maintenance of good health, rehabilitation of good health after illness.

A. Health services to be comprehensive must not be limited by geography, by ability to pay, and by social class. Accessibility and continuity are important components of a good system.

B. Group practice can provide an effective and efficient method of furnishing comprehensive medical care of good quality. This must include needed medical specialties and health services.

C. Need full range of health manpower, e.g., nurses, social workers, physical and occupational therapy, health aid service, nutritional service, laboratory support, specialists.

D. Must be able to draw upon every resource known to scientific medicine. In small communities there is a danger of duplicating experience and infrequently used facilities and personnel. Medical self sufficiency must be regionally based.

E. Must be able to deliver health care to anyone who needs it in the most efficient and economical manner.

V. Factors involved in comprehensive health care program

A. It is an individual responsibility for using health resources.

B. Community has collective responsibility for developing organized and continuing educational program. It is responsibility of personal physician to direct person to the integrated program.

C. Group practice of medicine is a way of integrating services of physicians.

VI. What is being done about planning?

A. Congress has passed bills promoting health planning.

B. We are beginning to look at health care as a whole. There is a concern with how various aspects of health care may be coordinated or integrated.

INTERNAL HOSPITAL ORGANIZATION

I. Personnel is key to good hospital administration.

   A. The more knowledgeable personnel are the better job is done.

   B. There is a need for good human relations.

   C. There is a need for good community relations.

II. Basic job of the hospital is to care for the sick.

   A. Regardless of size or kind, all hospitals have some things in common.

   B. There is a business side and a professional side to the operation of every hospital. Sometimes these are in conflict.

III. Types of hospitals.

   A. Government hospitals--federal and non-federal (36% of the hospitals).

   B. Voluntary, non-profit hospitals (50% of the hospitals).

   C. Proprietary hospitals are operated for profit.

      1. About 14% of the hospitals.

      2. Closed corporations--owned by doctors, etc.

   D. Short and long term hospitals.

      1. Short term hospitals where people spend only a few days or weeks.

      2. Long term hospitals which are for special problems, e.g., T.B. or mental cases.

IV. Administrative services of hospitals are broken into two areas.

   A. General services, such as, administration, maintenance.

   B. Special services like X-ray, laboratories, operating room.

V. Programs for hospital regulation.

A. Joint Commission for Hospital Accreditation--hospital of over 25 beds.

B. Licenses--issued by State Department of Public Health.

C. Agencies approving schools:

1. Nursing school

2. Interns in residence

3. X-ray technicians, etc.

VI. Governing boards of hospitals.

A. Organization of the board varies with the type of hospital.

B. Non-profit, voluntary community hospital has a Board of Trustees or Directors, members of which are not paid.

C. Legal responsibility for operation of hospital rests here.

D. Board makes policy for the hospital.

E. The hospital administrator is charged by the board to put the policies into operation.

F. Board has a number of committees to handle special problems; e.g., Executive Committee, Maintenance Committee, Finance Committee.

G. Board operates on its own bylaws which are in its charter.

VII. Medical staff.

A. They are concerned with the care of patients.

B. They have their own governing boards and committees.

C. Many hospitals have a joint committee to handle problems between medical staff and hospital administration.

VIII. Operation of hospital administration is broken down into departments.

A. Medical Records is one department.

B. Head of Medical Records is appointed by the hospital administrator.

C. Even in a small hospital the work needs to be broken down into functional parts and assigned to different administrative areas.

D. There should be job descriptions, written administrative procedures, recognized lines of authority, and lines of communication.

IX. Staff qualifications.

A. There are certification requirements for hospital positions.

B. All hospitals should be concerned with getting qualified people. This is a difficult problem because they offer only limited career potential.

C. In-service programs are needed constantly to bring personnel up to qualifications and keep them there.

ORGANIZATION AND MANAGEMENT OF A MEDICAL RECORDS DEPARTMENT

HOSPITAL ORGANIZATION AND MANAGEMENT

I. Topic: Hospital Organization and Administration.

II. Objective: To provide some basic knowledge on organization and administration of hospital as it relates to the over-all management and operation and relationships between Board of Governors, Administration, Medical Staff, Departments, Employees, and Community.

III. Activities or Procedures: Lectures, discussion, questions and answers, tests, role playing, and problem solving.

IV. Materials, Resources, and Bibliography: Topic outline of lecture, own experience. Reading references--books and publications:

MacEachern, Malcolm T., Hospital Organization and Management--2nd Ed., Physicians' Record Co., Chicago, 1947.

Huffman, Edna K., Manual for Medical Record Librarians--5th Ed., Physicians' Record Co., Chicago, 1963.

HOSPITALS, Journal of American Hospital Association, Chicago.

Cunningham, Robert M., The Modern Hospital, McGraw Hill, Chicago, 1968.

Hospital Management (The News and Technical Journal of Administration), Chicago.

Film: "Department Manager," Mountain Plains Educational Media Council Film Catalog, University of Colorado, Boulder, 30 min.

V. Assignments: None.

HOSPITAL ORGANIZATION AND MANAGEMENT

I. Hospitals.

A. Purpose.

B. Hospital classifications by ownership and control--(Special and Professional; Business and General; Facilities and Services--laboratory, X-ray, physical therapy, pharmacy, etc.).

C. Approvals--Standards and Licensure; Accreditation; Licensing and Reporting; Third Party Contracts; Schools.

D. Internal Organization--Corporation; Association; Board of Governors; Administration; Departments, Sub-units; Medical Staff.

E. External Organization--Affiliation and relationships with other community organizations and activities.

II. Governing Board (Board of Directors, Trustees).

A. Purpose, size, qualification and membership; selection.

B. Duties and Responsibilities.

C. Relationships of Board to Administration, Staff, and Community.

D. Officers and Committees.

III. Administration.

A. Duties and Responsibilities.

B. Relationships to Board, Medical Staff, Departments, and Community.

C. Volunteers and Community.

IV. Departmental.

A. Classifications in Professional, Special Services, Administrative, and General.

B. Department Heads and Supervisors.

1. Duties and Responsibilities.
2. Departmental relationships.

V. Medical Staff.

A. Organization, Duties, and Responsibilities.

B. Relationship to Board, Administration, Departments, and Community.

C. Functions of Medical Staff.

D. Appointment qualifications and membership on medical staff.

E. Medical Staff organization.

1. Categories of medical staff.
2. Departments, Committees, and Officers.

VI. Hospital Auxiliary (Volunteers).

A. Organization and primary purpose.

B. Relationship with Board, Administration, Staff, Departments, and Committees.

VII. Policies and Procedures.

A. Importance--Duties, responsibilities, authority, lines of communication control, efficiency of operation, planning, effective relationships, successful end results.

B. Down the Line--Board to Employee (for better communication, understanding, efficient operation towards hospital objective, good patient care).

ORGANIZATION AND MANAGEMENT

(outline for students)

A. Hospital Organization.

1. Governing Board.

a. Rule of hospital.

b. Purpose

c. Size and composition.

d. Responsibilities.

e. Meetings.

2. Hospital Administrator.

a. Authority delegated by Governing Board.

b. Duties and responsibilities.

c. Good leader.

3. Medical Staff.

a. Primary concern.

b. Types of Staff.

1. Open staff.

2. Closed staff.

c. Staff appointments.

d. Organization.

e. Review of work.

f. Research.

g. Chairman.

h. Meetings.

i. By-laws.

4. Departments of the Hospital.

a. Existence.

b. Delegation of authority to supervisor.

c. Organization.

d. Purpose.

5. Organization Chart (hospital) Illustration.

B. Medical Staff Committees.

1. Executive Committee.

a. Size and composition.

b. Meetings.

c. Duties.

2. Credentials Committee.

a. Size and composition.

b. Meetings.

c. Duties.

3. Joint Conference Committee.

a. Size and composition.

b. Meetings.

c. Duties.

4. Medical Record Committee.

a. Size and composition.

b. Meetings.

c. Duties.

5. Medical Audit Committee.

a. Size and composition.

b. Meetings.

c. Duties.

6. Infection Committee.

a. Size and composition.

b. Meetings.

c. Duties.

7. Tissue Committee.

a. Size and composition.

b. Meetings.

c. Duties.

8. Utilization Committee.

a. Size and composition.

b. Meetings.

c. Duties.

9. Questions from Students.

End of First Hour

C. Interdepartmental Relations.

1. Understanding Functions of Hospital.

a. Primary reason for existence of hospital.

b. Education and training.

c. Medical research.

2. Responsibility of Hospital Administrator.

3. Responsibility of Medical Staff.

4. Harmonious Existence with Other Departments.

5. Hospital Departments.

a. Admitting Department.

(1). Medical record begins here.

(2). Understanding of both departments necessary.

b. Nursing Service.

(1). Importance of good nursing notes.

(2). Medical record department made known to nurses.

c. Clinical Laboratory and Pathology.

(1). Laboratory reports filed with record.

(2). Delinquent pathology reports.

(3). Control for autopsy reports.

d. Surgery and Anesthesiology.

(1). Operative report.

(2). Anesthesia report or record.

e. X-ray or Radiology Department.

(1). X-ray reports filed with record.

(2). In small hospitals problems may result.

f. Physiotherapy Department.

(1). Physiotherapy reports filed with record.

(2). No existing problems.

g. Dietetics.

(1). Dietetics reports filed with record.

(2). No existing problems.

h. Medical Library.

(1). Combined with medical record department.

(2). Separate departments.

i. Business Services--Accounting, Purchasing, Supply.

(1). Contact with these departments.

(2). Budget responsibility.

(3). Equipment for department.

(4). Other supplies.

j. Maintenance and Housekeeping.

(1). Cleaning and upkeep of department.

(2). Maintenance and safety hazards.

k. Contact with Other Departments.

D. Film or Film Strip.

E. Re-cap of Session (2 Hours).

End of Second Hour

F. Organization and Management of Medical Record Department.

1. Functions of medical record department.
    a. Specific functions.
    b. Over-all functions.
    c. Medical records established for:
        (1). Patient.
        (2). Hospital.
        (3). Physician.
        (4). Research.
2. Organization--effective tool of management.
    a. Definition.
    b. Four types of organization.
        (1). Line organization.
        (2). Staff organization.
        (3). Line and staff organization.
        (4). Functionalized organization.
    c. Functionalized organization--medical record department.
3. Management--definition.
    a. Department managed in accordance with hospital policies.
    b. Good leadership of supervisor.
4. Medical Record Librarian--second level of management.
    a. Supervisory knowledge and skills.
    b. Technical knowledge and skills.
    c. Boss or leader.

5. Organizational Charts.
   a. Position (illustrate).
   b. Function (illustrate).
   c. Organizational charts displayed.
6. Work Flow.
   a. Straight-line.
   b. Study of work flow.
   c. Work simplification.
      (1). Selection of operation to be studied.
      (2). Write down steps.
      (3). Question steps.
      (4). Place into operation.
      (5). Select best method.
7. Definition of a Job.
   a. Requirements.
   b. Job analysis.
   c. Evaluation of each job analysis.
8. Job description.
   a. Definition.
   b. Steps to follow when writing job description (illustrate).
9. Procedure Manual.
   a. Definition.
   b. Invaluable tool in department.
   c. Result in uniformity of department.
   d. Use as teaching method.
   e. Procedures stated clearly and specifically.
   f. Difference in procedure manuals.
   g. Each employee should have copy of manual.

h. Employee's help enlisted when compiling manual.

i. Manual kept up to date.

10. Selection of Personnel.

a. Probably no medical record experience.

b. Best available candidate.

11. Training of Personnel.

a. Simple task.

b. Steps in training new employee.

12. Location of Medical Record Department.

a. Ideal location.

b. Functions centralized.

c. File room.

d. Accessible area.

13. Physical layout.

a. Adequate space.

(1). Requirements for each worker.

(2). Access to aisle space.

(3). Transcription area.

(4). Space for physicians completing records.

b. Adequate lighting.

c. Use of color.

(1). Good color scheme.

(2). Departments with no windows.

(3). Problem windows.

d. Tile floor or carpet.

e. Employees involved in plan of department.

f. Equipment.

(1). List of necessary equipment.

(2). Filing equipment--medical records.

(3). Filing equipment--indices.

(4). Filing equipment--if microfilming is done.

(5). Other equipment and supplies.

(6). Telephones.

(7). Equipment contributing to efficiency.

g. Expansion of department.

(1). Adequate space in building or expansion plans.

(2). Expansion thought of in terms of ten years.

14. Good organization of Medical Record (chart).

a. Waste of paper.

b. Convenience of physician.

c. Decision for use of forms prerogative of hospital.

d. Uniformity of forms in all hospitals in some communities.

e. Record forms committee.

f. Forms numbering systems.

g. Records kept simple--follow steps.

15. List of appropriate books for department or hospital:

a. Directory, American Medical Association.

b. Guide Issue of the American Hospital Association.

c. Five Basic Publications of Joint Commission on Accreditation of Hospitals, JCAH, 645 North Michigan Ave., Chicago, Illinois, 60611.

d. Hospital Accreditation References, AHA, 840 N. Lake Shore Drive, Chicago, Illinois, 60611.

e. Hospital Organization and Management, by Malcom T. MacEachern, M. D., Physician's Record Company, 3000 So. Ridgeland Ave., Berwyn, Illinois, 60402.

f. International Classification of Diseases Adapted, Vols. 1 and 2, United States Department of Health, Education, and Welfare, Public Health Service, U. S. Government Printing Office, Washington, D. C.

g. Legal Aspects of Medical Records, by Hayt and Hayt, Physician's Record Co.

h. Manual for Medical Record Librarians, by Edna K. Huffman, Physician's Record Co.

i. Standard Nomenclature of Diseases and Operations, by Edward T. Thompson and Adaline C. Hayden, American Medical Association, Chicago, Illinois.

G. Problems for Discussion.

H. Re-cap of Session (last 2 hours).

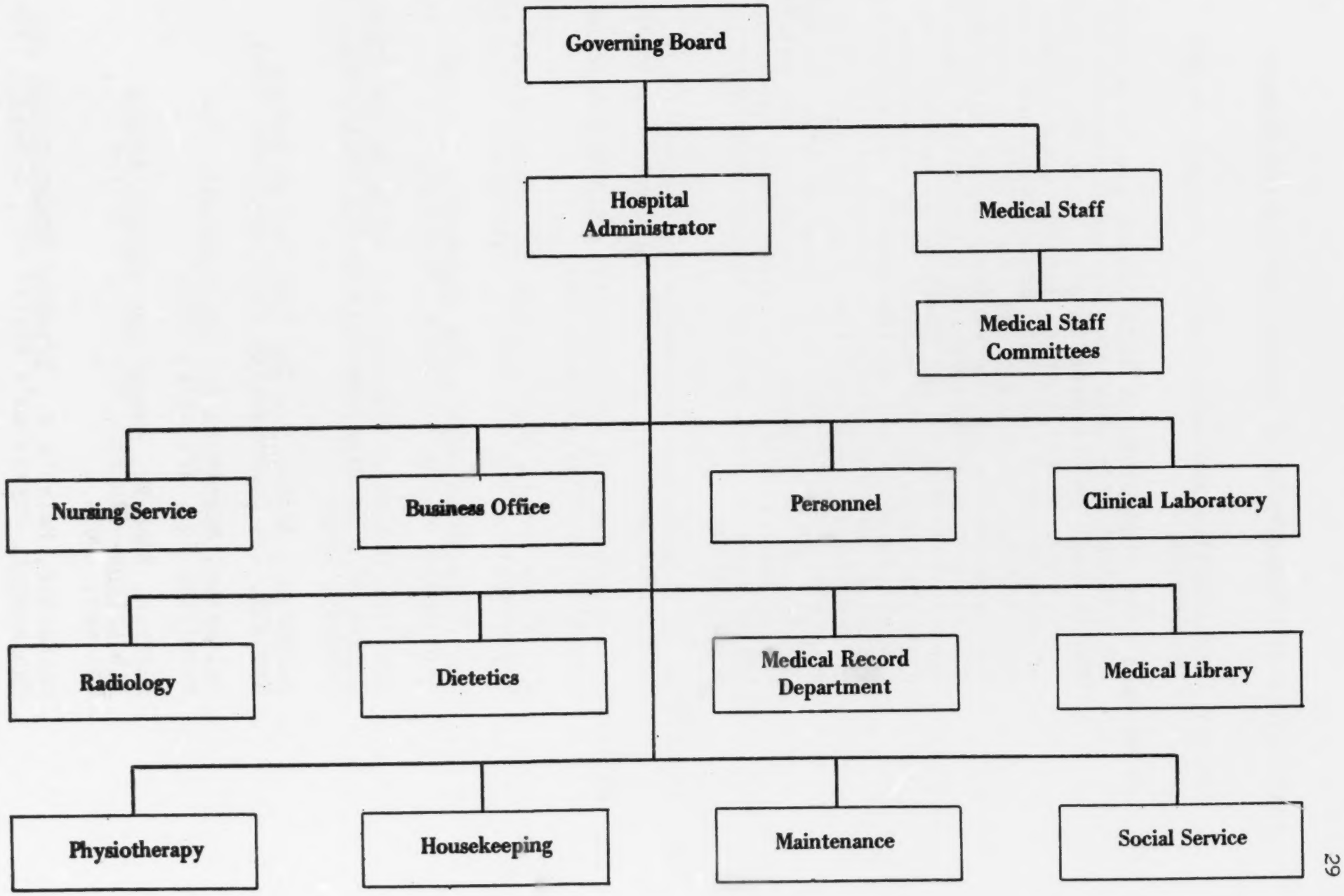
1. Questions from Students.

2. Any Further Discussion.

I. Assignment: Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chapter 1, Basic Principles; Chapter 2, Location and Facilities; and Chapter 6, Medical Record Forms.

Before our second week session read:
Manual for Medical Record Librarians, Huffman, Edna K., Chapter XV, Organization and Management of a Medical Record Department.

ORGANIZATION OF HOSPITAL



ORGANIZATION AND MANAGEMENT OF MEDICAL RECORD DEPARTMENT

I. Topic: Organization and Management of Medical Record Department

II. Objective: The objectives of this lesson are to acquaint the student with organization and management of the medical record department. To do so, we will first study hospital organization, organization of medical staff and staff committees, and inter-departmental relationships. We will then study the organization of the medical record department including responsibility and place of the department in relation to the hospital as a whole, responsibilities of the medical record librarian, operations performed in the department, selection, training, and supervision of personnel, layout of department, physical location, and equipment utilized. The student will be given time for discussion of these items. At the end of the session, the student should have acquired basic understanding of hospital and medical record department organization.

III. Activities or Procedures: Lectures, discussion, field trip, role playing, questions and answers, tests.

IV. Materials, Resources, and Bibliography: Lecture outline, hospital facility, references:

Air Force Manual 50-20, Guide for Supervisors, Department of the Air Force, Washington, D.C., 1955.

Air Force Manual 25-1, The Management Process, Department of the Air Force, Washington, D.C., 1954.

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, AHA, Chicago, 1962.

Bachmeyer, Arthur C., The Hospital in Modern Society, The Commonwealth Fund, New York, 1943.

Goldwater, Sigismund S., On Hospitals, The Macmillan Co., New York, 1947.

Huffman, Edna K., Manual for Medical Record Librarians--5th Ed., Physician's Record Co., Chicago, 1963.

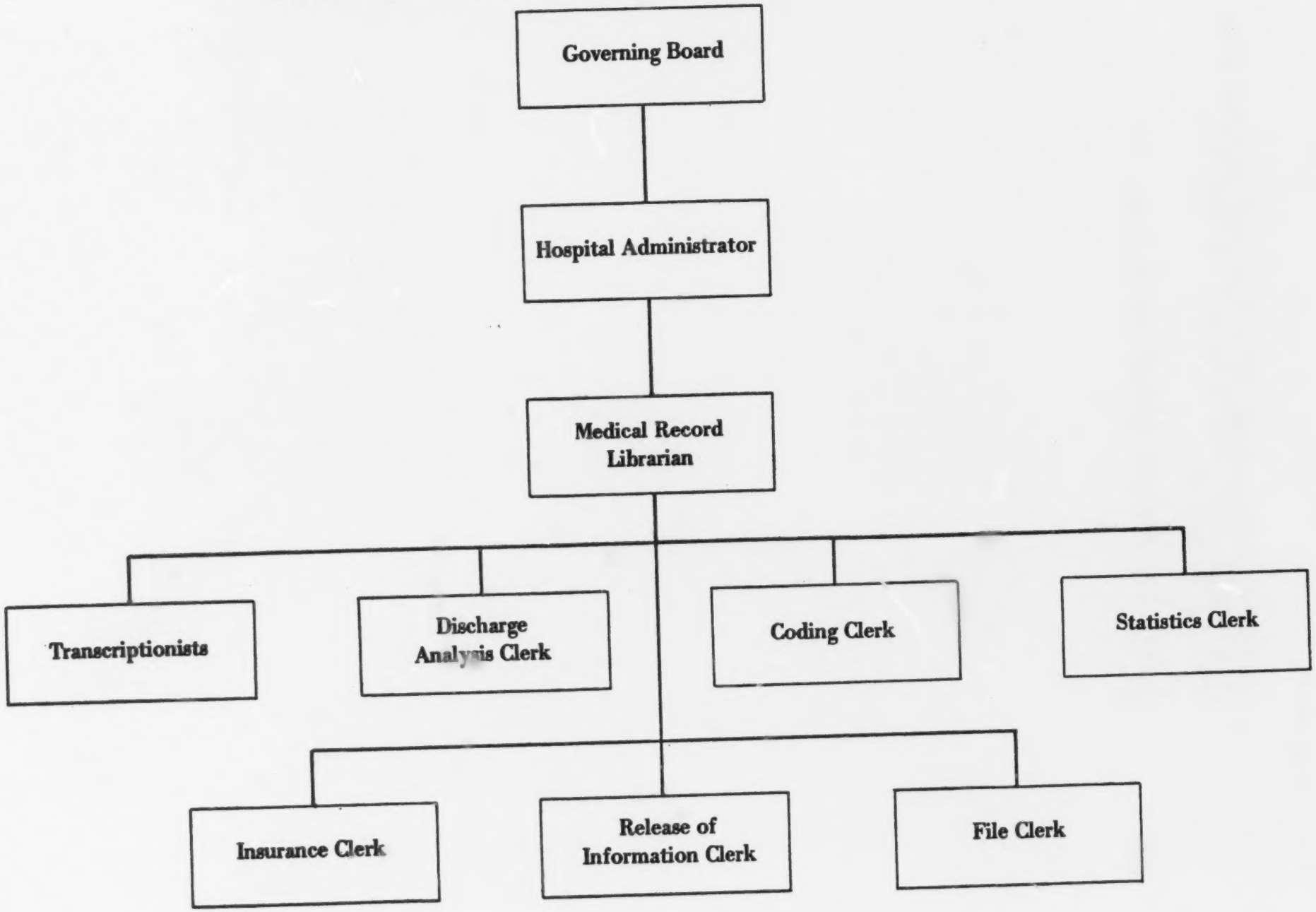
MacEacher, Malcolm T., Hospital Organization and Management, Physician's Record Co., Chicago, 1957.

V. Assignments:

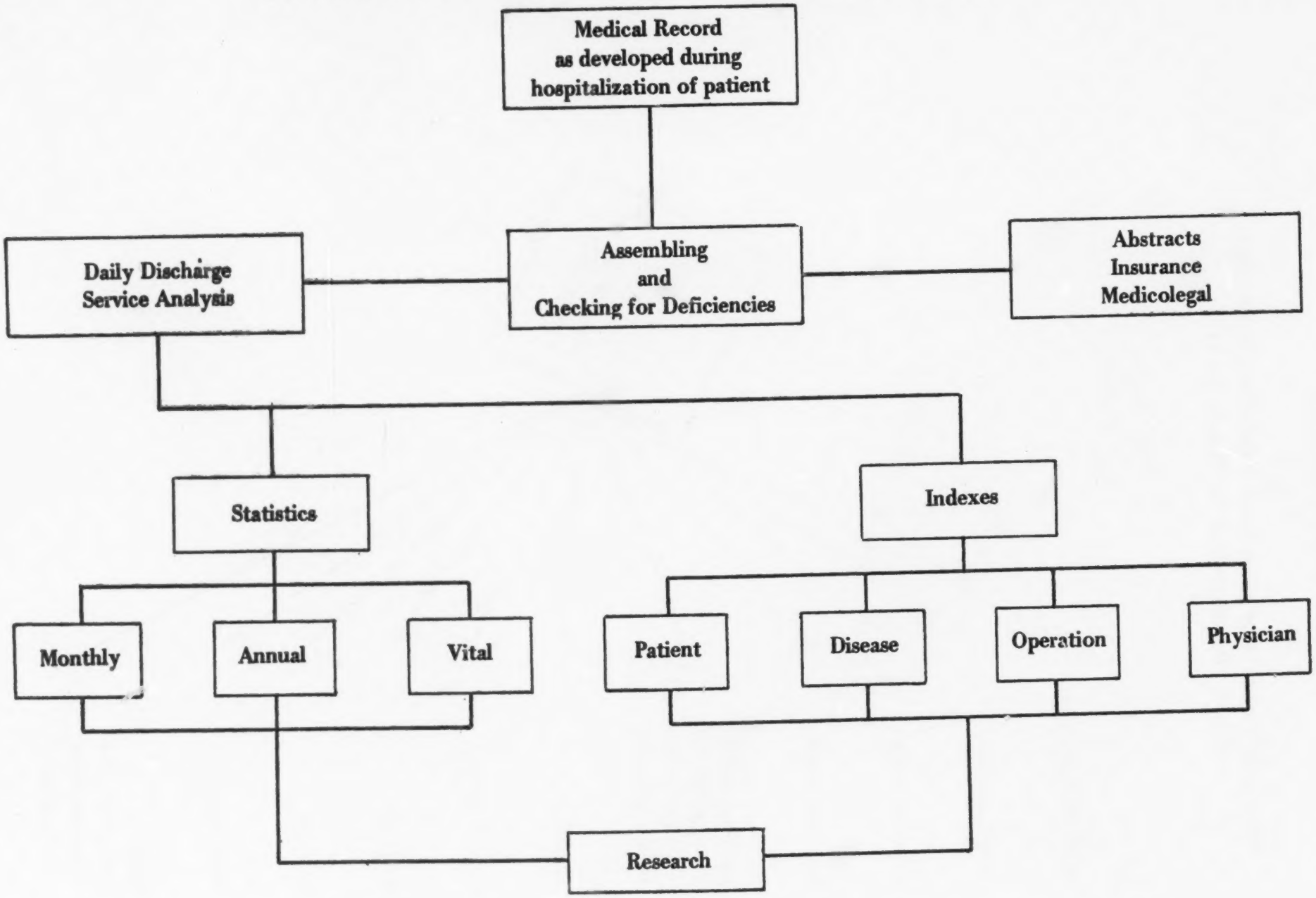
Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chs. 1, 2, and 6.

Manual for Medical Record Librarians, Huffman, Ch. XV.

ORGANIZATION OF MEDICAL RECORD DEPARTMENT

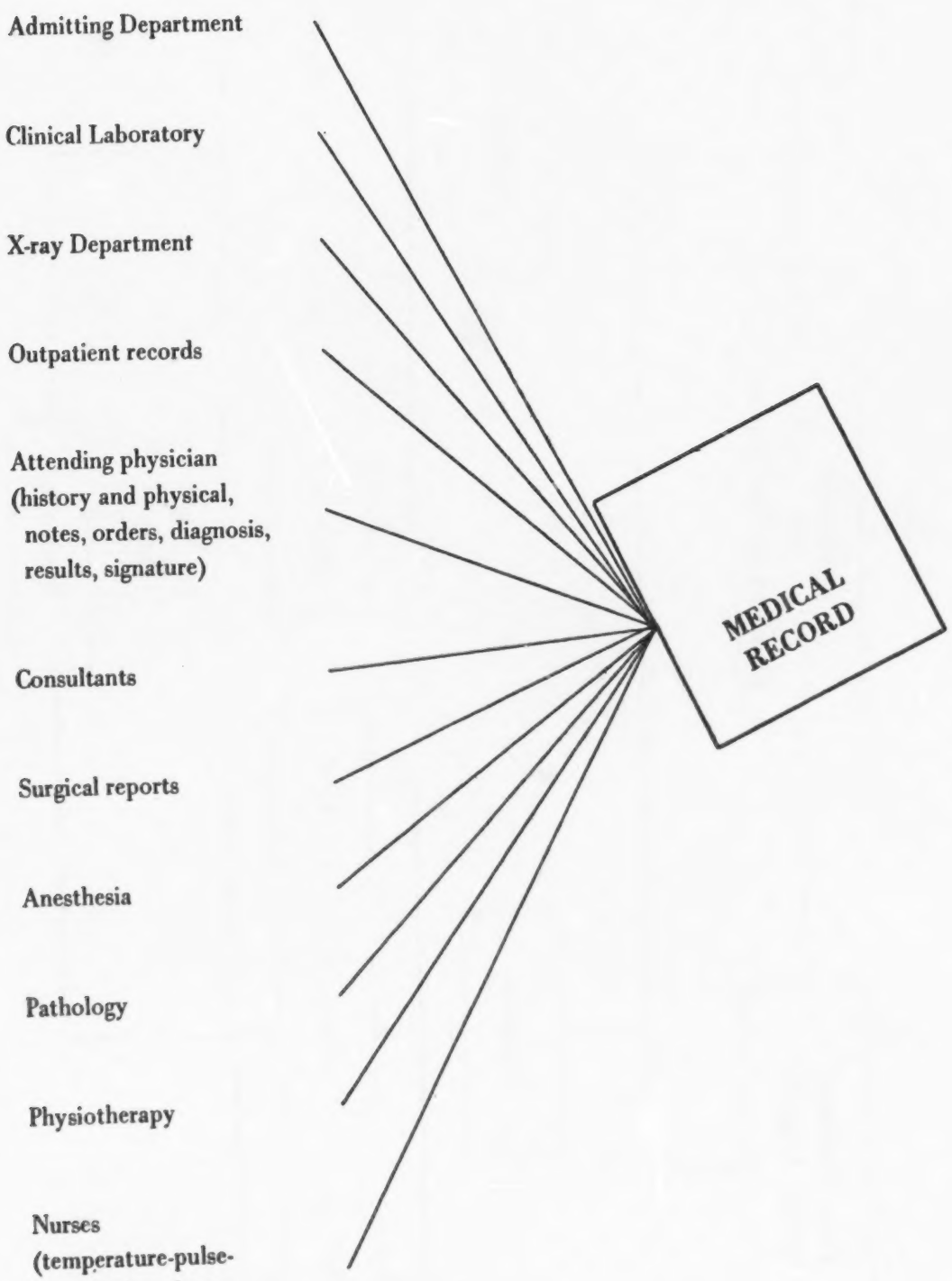


FUNCTIONS OF THE MEDICAL RECORD DEPARTMENT



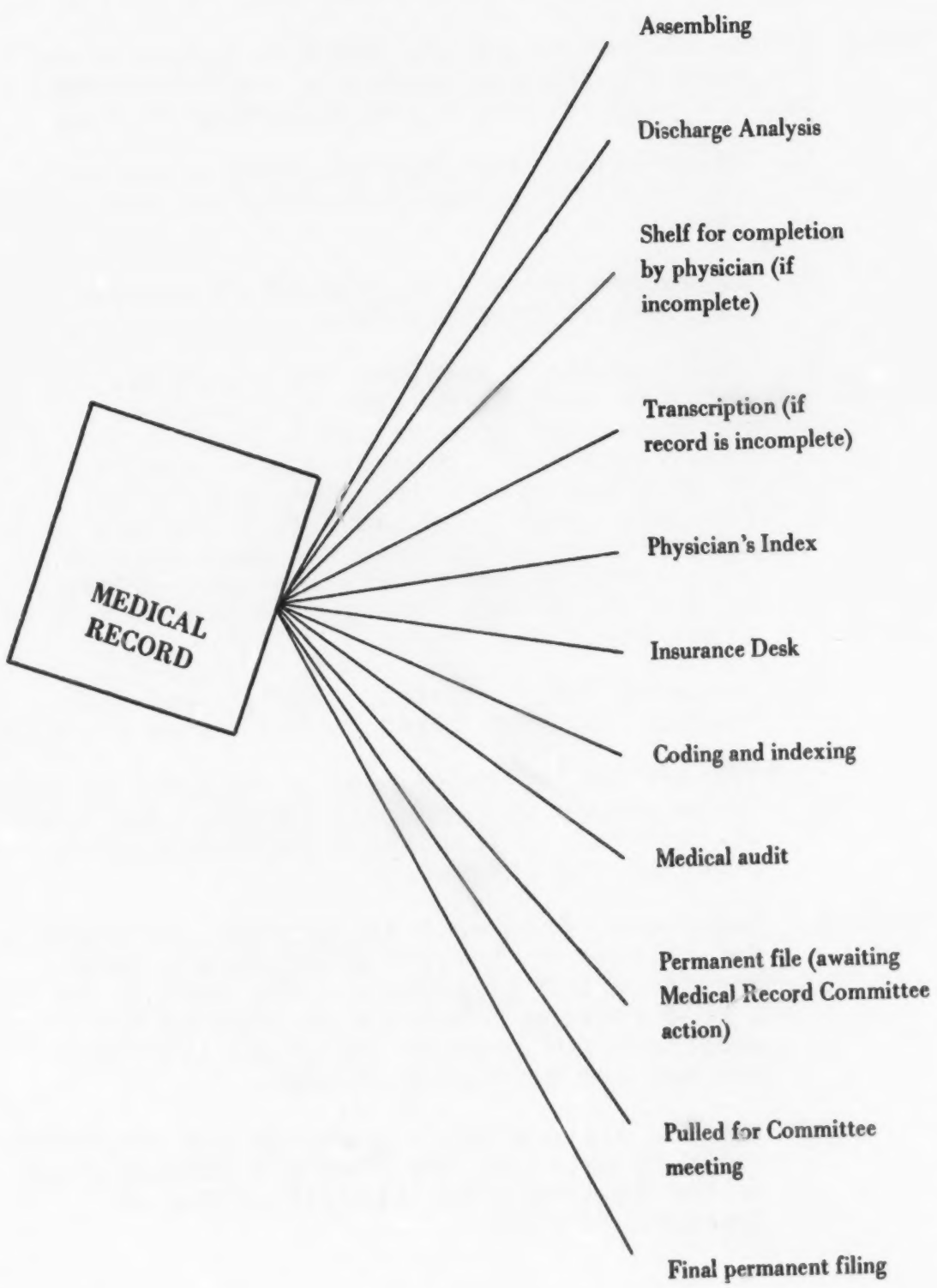
FORMS FLOW CHART

ROUTE OF COMPONENT PARTS OF THE MEDICAL RECORD PRIOR TO DISCHARGE OF THE PATIENT



WORK FLOW CHART

ROUTE OF THE MEDICAL RECORD AFTER DISCHARGE OF THE PATIENT



JOB DESCRIPTION

OCCUPATION: Supervisory Medical Record Clerk.

SUMMARY: Works under the supervision of the hospital administrator. She is guided in her functions by the Medical Record Committee and a consultant medical record librarian, if available.

WORK TO PERFORM: Using initiative and independent judgment and having a thorough knowledge of work involved, performs any or all of the following duties:

1. Assures that all medical records are accounted for by checking daily patient census.

2. Assembles medical records of discharged patients in proper order.

3. Quantitatively analyzes the component parts of medical records to insure completeness and accuracy according to the requirements of the accrediting bodies. If discrepancies exist, completes a deficiency check list and returns record to physician concerned. If case remains questionable, after reevaluation, refers record to Medical Record Committee for final decision.

4. Prepares daily, monthly, and annual statistical reports based on discharge analysis.

5. Transcribes dictated medical reports to be incorporated with medical record. May also be required to transcribe medical correspondence for physician.

6. Abstracts, from medical records, information for release to insurance companies, other hospitals, and physicians. She must apply a good working knowledge of what is appropriate for release and which records are not for general knowledge.

7. Assigns appropriate diagnostic and operative codes from either the Standard Nomenclature or the International Classification of Diseases Adapted.

8. Maintains the following indexes:

   A. Patient Index (Master File)
   B. Disease Index
   C. Operative Index
   D. Physicians' Index

9. Maintains a filing system which assures rapid location of records.

10. Be familiar with the objectives and functions of the Medical Record Committee, and be prepared to assist and have available medical records for review and any other necessary information.

11. May be required to coordinate the medical record department and the medical library.

DESCRIPTION OF PERSONAL REQUIREMENTS:

1. Requires good memory for a quantity of detailed work.

2. Requires good working knowledge of hospital medical records and the significance of accurate records.

3. Must be aware of and practice ethics, including medico-legal aspects, involved in the handling of all medical records.

4. Must be able to type 60-70 words a minute accurately.

5. Must be able to file accurately, whether it be numerically or alphabetically.

6. Shorthand is desirable but not a requirement for this position.

7. Must possess a well-rounded personality, ability for leadership, persistency, accuracy, cooperativeness, progressiveness, persuasiveness, decisiveness, and good judgment.

PROBLEMS FOR DISCUSSION

1. I can not delegate some of my responsibilities to my subordinates as that will weaken my position and cause it to be reduced in importance. Discuss:

2. Susie is a good worker but argues each time she is asked to do something. Eventually, she does a good job but wastes valuable time each time she starts a new procedure. How would you handle this employee?

3. Jane has been working in the medical record department for six months. She is doing medical transcription, mainly histories and physicals. As this is a small town, she knows many of the patients. She is doing well in her job but is very tempted to discuss the ills of the patients with others outside the hospital and indeed has done so. You, as the supervisor, become aware of this, hearing about it from someone outside the hospital. What would you do?

ROLE PLAYING

I. Action Situation: Medical Record Department Duties and Work Flow.

A. Objective.

1. Medical record functions to be accomplished within time limits daily.

2. Application of knowledge.

B. Roles.

1. Leader (medical record librarian?).

2. Other medical record personnel.

C. Action.

1. Patient admission procedure.

a. Admit and admission register.

b. Master file cards.

c. A & D sheets - all procedures.

d. a.m. census.

2. Admission record procedure.

a. Folders.

b. Forms - setup, etc.

3. Patient floor medical record activity.

4. Discharge procedure.

a. Receiving records.

b. Assembling and analysis - quantitative.

c. Discharge analysis and posting to all indices and registers.

d. Routing records.

e. Rechecking for completion.

f. Coding and indexing.

g. Filing.

5. Various processes with discharged records.

6. Various duties within department.

7. Records pulled to leave department or use in department.

8. Procedure manual, policy manual, time and motion studies, all work for day to be finished within day.

9. Month-end statistics.

II. Action Situation: Relationship with Medical Staff.

A. Roles.

1. Medical Record Librarian - Miss Quick.

2. Chief of Medical Staff - Dr. M. Rude.

3. Medical Staff Member - Dr. I. B. Mean.

4. Chairman of Medical Record Committee - Dr. R. Smart.

5. Administrator - Mr. M. Fairly.

6. Chairman of the Governing Board - Mr. J. Graves.

ACT I: Medical Record Department

ACT II: Administrator's Office

B. Problem.

Chief of Staff - Dr. M. Rude: 50 incomplete records dating back to 1967.

and

Medical Staff Member - Dr. I. B. Mean: 100 incomplete records dating back to 1966.

and

Chairman of Medical Records Committee - Dr. R. Smart: 3 incomplete charts, recent discharges.

C. What to do?

III. Action Situation: A Day in Medical Record Department.
Everything Seemed to Go Wrong.
Relationship with Other Departments.
Test of Medical Record Librarian.

A. Roles.

1. Medical Record Librarian.
2. Administrator.
3. Admissions Office Person.
4. Director of Nursing.
5. Laboratory Technician.
6. X-ray Technician.
7. Chief of Staff.
8. Janitor.
9. Hospital Attorney.

B. Problem--the events of the day in the department.

1. Admitting office skipped 100 numbers in assigning numbers to patients--discovered two days later.
2. Nurse on floor refuses to let medical record department have records of patients discharged for last four days because physicians want to keep them to finish.
3. Laboratory technician brings in reports (100 in number) held until patient discharged.
4. Chief of staff requests a patient record of another physician.
5. Janitor cleaning department at night read records on his wife who is under psychiatric care.
6. Hospital attorney requested all patient records admitted for automobile accident cases be sent to his office.
7. X-ray technician rubber stamping radiologist's X-ray reports as ordered by visiting radiologist.
8. Administrator took day off.
9. Medical record librarian has a headache!

C. What to do?

IV. Action Situation: Research in Hospital.

A. Roles.

1. Medical Record Librarian.

2. Medical Staff Member - Dr. C. U. Gross.

3. Administrator.

B. Place--Medical Record Department.

C. Problem--Dr. Gross has decided to do some research.

1. Appendectomy cases of pregnant women.

2. Gallbladder studies in patients over 50 years of age.

3. Dr. Gross <u>DEMANDS</u> records tomorrow.

D. What to do?

BASIC FILING SYSTEMS

BASIC FILING SYSTEMS

I. Topic: Basic Filing Systems and Arrangements Used in Medical Record Departments.

II. Objectives: The objectives of this lesson are to acquaint the student with filing systems used in medical record departments, why such systems are used, and to afford opportunity for practice in filing arrangements, both alphabetical and numerical. At the end of this two-hour session the student should be acquainted with these various filing systems and begin to understand which system would best fit his respective hospital. (The student will have an opportunity to further discuss individual needs in after-class hours and/or with the consultant.)

III. Activities and Procedures: Lesson Presentation.

A. Filing arrangements.

1. Alphabetical.

2. Numerical.

B. Four required indices maintained in medical record department.

1. Patient index.

2. Physicians' index.

3. Disease index.

4. Operation index.

(We will not be concerned in this lesson with physicians' index, disease index, or operation index. They are merely mentioned here because they are included with the patient index as required indices.)

C. Patient index.

1. Most important index in medical record department.

2. Cards are initiated in either admission department or medical record department.

3. Cards can be filed either alphabetically or phonetically.

4. Number index.

5. Permanency of file.

6. Personnel--orientation.

7. Content and size of card.

   a. 3 x 5 card.

   b. Information contained on card.

8. Steps for filing (alphabetical) according to letters of alphabet.

   a. Strict alphabetical sequence.

   b. Special problems encountered with various names.

   c. Number of cards behind each guide.

   d. Advantages of system.

   e. Searching for misfiles.

   f. Practice sessions.

9. Steps for filing (phonetic or Soundex) a system in which words or names filed according to sound in pronunciation.

   a. Surnames are coded to Soundex Code.

   b. Method of coding.

   c. Method of filing.

   d. Advantages of system.

   e. Practice session.

10. Questions from students on patient index.

D. Method of filing of medical record folder.

1. Numbering systems.

   a. Unit.

   b. Serial.

   c. Modified system of serial unit.

2. Filing systems.
   a. Centralized.
   b. Decentralized.
3. Filing of medical records.
   a. Strict numerical.
      (1). Procedure of filing.
      (2). Personnel.
      (3). Filing equipment.
      (4). Practice session.
   b. Terminal digit.
      (1). Procedure of filing.
      (2). Personnel.
      (3). Filing equipment.
      (4). Practice session.
   c. Charge out systems.

E. Short recap of two-hour session.
   1. Questions from students.
   2. Discussion.

IV. Assignment: Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962, Ch. 3, "Record Filing System."

Questions will be posed to the students during the lecture portions. Audio-visual aids will be used in giving filing instructions for patient index, both alphabetical and phonetic, and for filing medical records, both strict numerical and terminal digit.

V. Bibliography:

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Remington Rand, Brochures on Soundex Filing System.

BASIC FILING SYSTEMS

(outline for students)

I. Filing arrangements.

   A. Alphabetical.

   B. Numerical.

II. Four required indices maintained in medical record department.

   A. Patient Index.

   B. Physicians' Index.

   C. Disease Index.

   D. Operation Index.

III. Patient Index.

   A. Most important index in medical record department.

   B. Cards initiated in either admission department or medical record department.

   C. Cards filed either alphabetically or phonetically.

   D. Number Index.

   E. Permanency of file.

   F. Personnel--orientation.

   G. Content and size of card.

      1. 3 x 5 card.

      2. Information contained on card.

   H. Steps for filing (alphabetical) according to letters of alphabet.

      1. Strict alphabetical sequence.

      2. Special problems encountered with various names.

      3. Number of cards behind each guide.

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I. Steps for filing (phonetic or Soundex)--system in which words or names filed according to sound in pronunciation.

1. Surnames coded to Soundex code.

2. Method of coding.

3. Method of filing.

4. Advantages of system.

5. Practice session.

J. Questions from students on patient index.

IV. Method of filing of medical record folder.

A. Numbering systems.

1. Unit.

2. Serial.

3. Modified system of serial-unit.

B. Filing systems.

1. Centralized.

2. Decentralized.

C. Filing of medical records.

1. Strict numerical.

a. Procedure of filing.

b. Personnel.

c. Practice session.

2. Terminal digit.

a. Procedure of filing.

b. Personnel.

c. Filing equipment.

d. Practice session.

3. Charge-out systems.

V. Recap of two-hour session.

A. Questions from students.

B. Further discussion.

VI. Assignment: Guide to Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962, Ch. 3, "Record Filing System."

STEPS FOR FILING ALPHABETICALLY

1. Arrange cards in strict alphabetical sequence placing surname first, then given name and middle name or initial. If surname and given name are the same, arrange cards according to initial. If there is no initial, place earliest birth date on top.

2. Names beginning with prefixes or hyphenated names are filed in strict alphabetical sequence. Names beginning with Mc or Mac are filed in strict sequence unless you are using commercial guides separating Mc and Mac. This is acceptable, but be consistent. File any religious names as brothers and sisters under religious name commonly used; however, it is well to place the family surname in parenthesis. Legal name of a married woman along with her given name should be used, as Thomas, Mrs. Eileen (John). If a female patient has married since her last period of hospitalization, a cross-reference should be made. One card is left filed under her maiden name indicating a reference to the card filed under the married name. This can also be done when a patient is admitted with an alias.

3. No more than 20 cards should be filed behind a guide; therefore, a file with 4,000 cards would require a 200-division index. Generally, there are twice as many W's as A's, B's as G's, and one name in every five begins with either M or S; Q, X, and I are few.

4. The main advantages of this type of filing of the patient index cards are easy maintenance and clerks can be oriented to filing with minimal instruction.

5. If a card appears to be misfiled, look for various ways the name might have been spelled.

STEPS FOR FILING BY SOUNDEX

1. When cards are filed according to this system, the surname is coded to one alphabetic letter, the beginning letter, and a 3 digit code number. The first letter of the surname is not coded. Then cards are arranged in alphabetical order with 26 sections. Within each section 6 groups are used. Each group has a code number as follows:

Letters	Number equivalents
b, f, p, v	1
c, g, j, k, q, s, x, z	2
d, t	3
l	4
m, n	5
r	6
no consonants, or not enough consonants	0

a, e, i, o, u, y, w, and h are not coded--no number equivalents.

2. Five rules for coding.

   a. Each name is coded to 3 digits.

   b. Two letters together or double letters are coded as one letter.

   c. If a letter and its equivalent appear together they are coded as one letter.

   d. The first letter in the surname is not coded but appears with the 3 digits.

   e. Vowels and y are separators. H and w are not coded either.

PRACTICE SHEET FOR FILING PATIENT INDEX CARDS

Mrs. Joseph (Kathryn) Schmidt

John S. Kelly

Sister Mary Matthew

Rufus, Adolph

Plumblade, Josephine

Clarence Behrens

Robert W. Davis

Judy Karr

Garcia, Ernest John

Dr. Juan Romero

Gleason, James

Shubert, Charles J.

Margaret MacAuley

J. S. Carlson

Shotkowski, Alex

Westmoreland, Kenneth

Nicholas Carr

John Vigil

Carlsen, Ethel M.

Higginbotham, Harry H.

Janet C. Keller

McMahon, Mortimer

Graham, Edward T.

White, Harry

Maes, Carlos

Berens, Louise

Zwolle, Benjamin

Robert F. Davis

Obrien, Sr. M. Patricia

Lund, Eliz. A.

INTERNATIONAL CLASSIFICATION OF DISEASES AND OPERATIONS

INTERNATIONAL CLASSIFICATION OF DISEASES

I. Topic: Basic Principles of ICDA.

II. Objective: To familiarize the student with the ICDA coding system.

III. Activities and Procedures:

A. Explanation of the ICDA code.

B. Discussion of the uses of the ICDA.

C. Presentation of examples and coding problems using the ICDA with operations.

IV. Materials: Examples, coding problems, 5 x 8 steel file containing indices for Diseases and Operations.

V. Assignment: Coding problems will be given the students as homework. These will be checked in class the following session.

VI. Reference: International Classification of Diseases Adapted, Vol. 1, U. S. Department of Health, Education, and Welfare, Public Health Service, Washington, D.C., 1962.

ICDA CODING SYSTEM

I. What is ICDA?

A. Background.

1. International Classification of Diseases, adapted for indexing hospital records by diseases and operations. (U. S. Public Health Service Publication 719, Revised Edition, 2 Vols., December, 1962).

2. Method of classifying diseases and operations for:

a. Research purposes.

b. Joint Commission requirement.

B. Explanation of ICDA Code Books.

1. Vol. II. Alphabetical Index.

a. Arranged by condition, not anatomical site, i.e., "hemorrhage of mouth," look under "hemorrhage" not "mouth."

b. Arranged by noun rather than adjective, i.e., "acute appendicitis" is listed under "appendicitis, acute," rather than "acute."

2. Vol. I Tabular List.

a. Section I--Diseases and Injuries.

b. Section II--Operations and Treatments.

c. Arranged in numerical order by code number.

II. Explanation of Contents of Vol. I.

A. Read through major diagnostic groups with brief explanation of each.

1.	Infective and Parasitic Diseases	Page 1
2.	Neoplasms	" 23
3.	Allergic, Endocrine System, Metabolic and Nutritional Diseases	" 51
4.	Diseases of Blood and Blood-forming Organs	" 61
5.	Mental, Psychoneurotic and Personality Disorders	" 65
6.	Diseases of the Nervous System and Sense Organs	" 73

7.	Diseases of the Circulatory System	Page 91
8.	Diseases of the Respiratory System	" 103
9.	Diseases of the Digestive System	" 111
10.	Diseases of the Genitourinary System	" 129
11.	Deliveries and Complications of Pregnancy, Childbirth, and Puerperium	" 146
12.	Diseases of the Skin and Cellular Tissue	" 159
13.	Diseases of the Bones and Organs of Movement	" 173
14.	Congenital Malformations	" 186
15.	Certain Diseases of Early Infancy	" 194
16.	Symptoms, Senility, and Ill-defined Conditions	" 198
17.	Injuries and Adverse Effects of Chemical and Other External Causes	" 207

III. Coding Problems.

A. Infective and Parasitic Diseases. (Use Vol. II--look up underlined word.)

		Answer
1.	Pulmonary <u>tuberculosis</u>, active, minimal	002.0
2.	<u>Pleurisy</u> with effusion due to tuberculosis	003.1
3.	Pulmonary <u>tuberculosis</u>, active	002.3
4.	Primary <u>tuberculosis</u> of skin	014.0

B. Neoplasms, Malignant (140-239)

1.	Carcinoma of the ovary	175.0
2.	Adenocarcinoma of the prostate	177.
3.	Carcinoma of the cervix	171.
4.	Carcinomatosis	199.9

C. Allergic, Endocrine System, Metabolic and Nutritional Diseases (240-245), page 51. Subgroupings should always be used with codes 240 to 245.

1.	Allergic bronchitis due to feathers	241.2
2.	Urticaria, due to undetermined etiology	243.9
3.	Diabetes Mellitus	260.

D. Diseases of Blood and Blood-forming Organs

1.	Iron deficiency anemia secondary to blood loss	291.0
2.	Anemia	293.
3.	Polycythemia	294.

E. Mental, Psychoneurotic, and Personality Disorders (300-329).

1.	Delirium tremens (alcoholic)	301.1
2.	Manic Depressive Reaction	319.2

		Answer
F.	Diseases of the Nervous System and Sense Organs (330-398)	
	1. Cerebral thrombosis	332.1
	2. Cerebral encephalopathy due to arteriosclerosis or hypertension	334.1
	3. Paralysis agitans	350.
G.	Diseases of the Circulatory System (400-468)	
	1. Rheumatic fever without mention of heart involvement	400.
	2. Active rheumatic myocarditis	401.2
	3. Acute coronary occlusion	420.1
H.	Diseases of the Respiratory System (470-527)	
	1. Acute nasopharyngitis (common cold)	470.
	2. Bronchopneumonia due to staphylococcus	491.2
	3. Spontaneous pneumothorax	520.
I.	Diseases of the Digestive System (530-587)	
	1. Ulcer of stomach without perforation, with hemorrhage	540.1
	2. Gastroduodenitis	543.
	3. Acute appendicitis, gangrenous	550.
J.	Diseases of the Genitourinary System (590-637)	
	1. Acute nephritis	590.
	2. Pyelitis, pyelonephritis	600.0
K.	Deliveries and Complications of Pregnancy, Childbirth, and Puerperium (640-689)	
	1. Pyelitis of pregnancy	640.0
	2. Preeclampsia of pregnancy	642.2
	3. Threatened abortion	648.0
	4. Abortion, incomplete	650.0
	5. Delivery without mention of complication	660.
	6. Delivery complicated by cephalopelvic disproportion	674.0
L.	Diseases of the Skin and Cellular Tissue (690-716)	
	1. Furunculosis of face	690.0
	2. Cellulitis of right upper arm with lymphangitis	693.2
	3. Eczema	701.
	4. Eczema, atopic	708.3

		Answer
M.	Diseases of the Bones and Organs of Movement (720-749)	
1.	Acute arthritis, nonpyogenic	721.
2.	Rheumatoid arthritis	722.0
3.	Osteoarthritis	723.0
4.	Acute osteomyelitis	730.0
5.	Herniation of nucleus Pulposus	735.
6.	Synovitis of shoulder	741.1
N.	Congenital Malformations (750-759)	
1.	Congenital hydrocephalus	752.
2.	Congenital hypertrophic pyloric stenosis	756.2
3.	Congenital megacolon	756.5
4.	Imperforate anus	756.6
O.	Certain Diseases of Early Infancy (760-776)	
1.	Ophthalmia Neonatorum	765.
2.	Erythroblastosis without mention of nervous affection	770.0
3.	Hemorrhagic disease of the newborn	771.
P.	Symptoms, Senility, and Ill-defined Conditions (780-795)	
1.	Convulsions	780.2
2.	Epistaxis	783.0
3.	Pylorospasm	784.2
Q.	Injuries and Adverse Effects of Chemical and Other External Causes (800-999)	
1.	Fracture, closed, of cervical spine	805.0
2.	Fracture, open, of pelvis	808.1
3.	Fracture, open, intertrochanteric section of femur	820.1
4.	Dislocation of acromioclavicular joint	831.
5.	Concussion of brain	852.0
6.	Traumatic hemothorax with open wound into thorax	860.1
7.	Traumatic amputation of thumb without complication	886.0
8.	Contusion of abdominal wall	922.
9.	Anaphylactic shock	999.0
10.	Hospital contracted infection due to transfusion	999.5
IV.	Coding Problem on Operations.	
A.	Operations on Nervous System (01-06)	
1.	Craniotomy	01.0
2.	Lobotomy	01.1
3.	Spinal puncture	03.3

		Answer
B.	Operations on Endocrine System (08-09)	
	1. Thyroidectomy, subtotal	08.1
	2. Ligation of thyroid arteries	08.6
C.	Operations on Eye (10-18)	
	1. Enucleation of eyeball	10.4
	2. Extraction of lens, intracapsular	17.4
D.	Operations on Ear, Nose, and Throat (20-22)	
	1. Tympanotomy	20.4
	2. Mastoidectomy, simple	20.7
	3. Submucous resection of nasal septum	21.1
E.	Operations on Buccal Cavity and Esophagus (24-28)	
	1. Extraction of tooth, simple	24.1
	2. Removal of salivary calculus	25.1
	3. Tonsillectomy without adenoidectomy	27.1
	4. Dilation of esophagus	28.6
F.	Operations on Heart and Intrathoracic Vessels (30-32)	
	1. Commissurotomy	30.3
	2. Catheterization of right heart	30.4
	3. Removal of embolus of great vessel, intrathoracic	31.1
G.	Operations on Bronchi, Lung, Pleura, Chest Wall, and Mediastinum (33-35)	
	1. Thoracentesis	34.1
	2. Complete lobectomy	35.3
H.	Operations on Gastrointestinal Tract and Related Organs and Tissues (40-57)	
	1. Repair of inguinal hernia, recurrent	40.1
	2. Exploratory laparotomy or celiotomy	41.1
	3. Pyloromyomoty	44.1
	4. Total Gastrectomy	44.3
	5. Appendectomy	45.1
	6. Colostomy	47.1
	7. Choledochotomy	53.0
	8. Splenectomy	56.1
	9. Removal of embolus of abdominal aorta	57.1
I.	Operations on Urinary and Male Genital Systems (60-69)	
	1. Nephrectomy, complete	60.4
	2. Nephropexy	60.6

		Answer
3.	Ureterectomy	62.1
4.	Cystectomy, complete	63.2
5.	Urethroplasty	64.4
6.	Prostatectomy, transurethral	66.2
7.	Incision and drainage of cyst of tunica vaginalis	67.0
8.	Orchiectomy, bilateral, complete	67.5
9.	Epididymectomy	68.5
10.	Vasectomy, complete	68.1

J. Operations on Female Genital Organs, Excluding Obstetrical (70-75)

1.	Salpingo-oophorectomy, unilateral	70.3
2.	Biopsy of ovary	70.8
3.	Salpingectomy, bilateral	71.2
4.	Hysterectomy, total, vaginal approach	72.6
5.	Dilatation and curettage of uterus	72.8
6.	Hysteropexy	73.4
7.	Repair of cystocele and/or rectocele	74.4
8.	Excision of Bartholin's gland	75.3

K. Obstetrical Procedures (76-78)

1.	Artificial rupture of membranes	76.0
2.	Delivery by low forceps with episiotomy	76.4
3.	Dilation and curettage following abortion	77.1
4.	Repair of laceration of cervix, postpartum	77.2

L. Operations on Musculoskeletal System (80-87)

1.	Excision of bone for graft (donor site)	80.3
2.	Complete ostectomy	80.4
3.	Sternal puncture	80.6
4.	Refracture of bone for faulty union	81.2
5.	Closed reduction of femur	82.0
6.	Open reduction of fibula with internal fixation	82.2
7.	Arthrotomy of knee	83.0
8.	Excision of semilunar cartilage of knee joint	83.5
9.	Spinal fusion, lumbosacral	84.4
10.	Excision of bursa of great toe	85.3

M. Operations on Peripheral Blood Vessels and Lymphatic System (88)

1.	Ligation and stripping of varicose vein of leg	88.4
2.	Radical neck dissection	88.7
3.	Biopsy of lymph nodes	88.8

		Answer
N.	Operations on Skin and Subcutaneous Tissue (90)	
1.	Onychectomy	89.2
2.	Biopsy of skin and subcutaneous tissue	89.8
O.	Non-Surgical Procedures (90-99)	
1.	Otoscopy for removal of foreign body	90.0
2.	Laryngoscopy	90.2
3.	Cystoscopy	90.6
4.	Proctoscopy	90.5
5.	Myelography	92.1
6.	Retrograde Pyelography	93.2
7.	Deep radiation therapy	95.2
8.	Gynecological implants of radioactive substance	95.5
9.	Shock therapy	99.0
10.	Use of artificial kidney	99.5

INDEXING

Headings for Cards for Disease Indices		Codes
I.	Infective and Parasitic Diseases.	002-138
II.	Neoplasms	140-239
	Malignant (140-199.9) Benign (210-229) Unspecified (230-239)	
III.	Allergic Endocrine System, Metabolic and Nutritional Diseases	240-289
IV.	Diseases of Blood and Blood-forming Organs. . .	290-299
V.	Mental, Psychoneurotic and Personality Disorders	300-329
VI.	Diseases of the Nervous System and Sense Organs	330-398
VII.	Diseases of the Circulatory System.	400-468
VIII.	Diseases of the Respiratory System.	470-527
IX.	Diseases of the Digestive System.	530-587
X.	Diseases of the Genitourinary System.	590-637
XI.	Deliveries and Complications of Pregnancy, Childbirth and Puerperium	640-689
XII.	Diseases of Skin and Cellular Tissue.	690-716
XIII.	Diseases of Bones and Organs of Movement. . . .	720-749
XIV.	Congenital Malformations.	750-759
XV.	Certain Diseases of Early Infancy	760-776
XVI.	Symptoms, Senility and Ill-defined Conditions .	780-795
XVII.	Injuries and Adverse Effects of Chemical and Other External Causes	800-999

Supplementary Classifications

	Special Conditions and Examinations without Sickness.	Y00-Y18

Classification of Liveborn Infants According to Type of Birth. . . . . Codes Y20-Y29

Classification of Causes of Stillbirth. Y30-Y39

Supplementary Classification of External Cause of Injury. E802-E998

Headings for Cards for Operation Indices

Classification of Operations and Treatments

1. Operations on Nervous System. 01-06

2. Operations on Endocrine System. 08-09

3. Operations on Eye 10-18

4. Operations on Ear, Nose, and Throat 20-22

5. Operations on Buccal Cavity and Esophagus . 24-28

6. Operations on Heart and Intrathoracic Vessels 30-32

7. Operations on Bronchi, Lung, Pleura, Chest Wall, and Mediastinum 33-35

8. Operations on Breast. 38

9. Operations on Gastrointestinal Tract and Related Organs and Tissues. 40-57

10. Operations on Urinary and Male Genital Systems 60-69

11. Operations on Female Genital Organs, Excluding Obstetrical 70-75

12. Obstetrical Procedures. 76-78

13. Operations on Musculoskeletal System. . . . 80-87

14. Operations on Peripheral Blood Vessels and Lymphatic System. 88

15. Operations on Skin and Subcutaneous Tissue. 89

16. Certain Non-surgical Procedures 90-99

CODING AND INDEXING (ICDA)

I. Topic: Brief Review of ICDA and Explanation of the Use of Volumes I and II.

II. Objective: The students are to learn how to locate the various diseases and operative procedures.

III. Activities and Procedures:

Hospitals are required to maintain a minimum of four indices--the patients' index, physicians' index, disease and operation indices. Cards will be distributed to the students and instructions given for completion of the index cards.

The patients' index is an arrangement of cards containing the name and hospital number of the patient. It is the key needed to locate any information in the medical record department pertaining to a patient.

The physicians' index is a record of the work done and the end results obtained by physicians practicing in the hospital. It is a strictly confidential record and should be available for inspection only to the governing board of the hospital through the administrator, the medical audit committee, the credentials committee for an evaluation of the work of the individual physician or to the physician himself for a review and analysis of his own work.

Disease and operation indexing is the last major step in making the medical records readily available for research. These diagnoses must conform to terminology of standard nomenclature.

The group will be divided into three classes--one for beginners, one for intermediate, and one for advanced. During the first hour the students will be given a test reviewing 12 coding problems.

IV. Assignment:

Coding problems have been assigned to the three groups, and "homework" will be assigned for the first day so that the papers may be brought to class the following day and corrections made.

I. C. D. A.

1. Vincent's infection of mouth
2. Infectious Encephalitis, acute
3. Herpes zoster of eye
4. Infectious hepatitis
5. Dermatophytosis of foot
6. Adenocarcinoma of palate
7. Malignant Melanoma, skin of breast
8. Lipoma of spermatic cord
9. Bronchitis due to dust
10. Toxic nodular goitre
11. Thyroiditis, acute
12. Adenoma of parathyroid gland
13. Iritis due to gout
14. Renal glycosuria
15. Pernicious anemia
16. Aplastic anemia
17. Hemophilia
18. Acute brain syndrome due to arteriosclerosis
19. Addiction to barbiturates
20. Subarachnoid hemorrhage, (non traumatic)
21. Trigeminal neuralgia
22. Corneal ulcer, right eye
23. Mature cataract, left eye
24. Acute otitis media, left
25. Chorea
26. Arteriosclerotic heart disease

27. Acute myocardial infarction
28. Inguinal hernia c obstruction
29. Esophageal hiatus hernia
30. Cholecystitis with Cholelithiasis
31. Diverticulum of bladder
32. Pyelitis--pregnancy 32 weeks
33. Cystitis due to abortion
34. Pregnancy, uterine del. c postpartum hemorrhage
35. Pregnancy, uterine del. previous C. Section
36. Cesarean Section, low cervical
37. Kyphoscoliosis
38. Cephalhematoma
39. Osteofibrosarcoma of humerus
40. Papilloma, malignant, of left kidney

TEST REVIEW

1. Rheumatoid arthritis _____
2. Meningitis due to H. influenzae _____
3. Virus bronchopneumonia _____
4. Benign hypertrophy of prostate _____
5. Old myocardial infarction _____
6. Arteriosclerotic gangrene _____
7. Adenoma of thyroid _____
8. Immature cataract _____
9. Chocolate cyst of ovary _____
10. Bleeding duodenal ulcer _____
11. Delivery complicated by precipitate labor _____
12. False labor _____

EXERCISE I--INTERMEDIATE GROUP

	Terms	Answers
1.	Varicose Ulcer	460.0
2.	Congestive heart failure	434.1
3.	Diabetic acidosis	260.4
4.	Congenital dislocation of hip	758.0
5.	Postoperative infection	998.5
6.	Uterine fibroid	214.
7.	Perthes' disease	732.3
8.	Recurrent dislocation of the patella	734.
9.	Anxiety reaction	324.0
10.	Streptococcal tonsillitis	051.
11.	Compound fracture of mandible	802.3
12.	Repair of aneurysm of the abdominal aorta	57.3
13.	Bilateral salpingo-oophorectomy	70.5
14.	Laminectomy with excision of herniated lumbosacral disc	83.4
15.	Chronic brain syndrome associated with cerebral arteriosclerosis	313.0
16.	Preeclampsia of pregnancy	642.2
17.	Delivery complicated by cervical dystocia	675.2
18.	Malignant neoplasm of sigmoid colon	153.3
19.	Dilatation and curettage for removal of retained placenta	77.1
20.	Open reduction of fracture of shaft of femur with fixation by intramedullary nail	82.2
21.	Nonunion of fracture of femoral neck	820.9
22.	Angina pectoris with myocardial infarction	420.1
23.	Urticaria due to penicillin reaction	963.0) 243.6)
24.	Subarachnoid hemorrhage due to rupture of cerebral aneurysm	330.
25.	Premature twin delivered by cesarean section	Y24.3

EXERCISE II--ADVANCED GROUP

1. Partial gastrectomy with gastroduodenostomy
2. Diathermy for reattachment of retina
3. Surgical aftercare
4. Observation, mental, without need for further care
5. Transient paralysis of right arm, etiology unknown
6. Open wound of hand with division of extensor pollicis longus tendon
7. Generalized carcinomatosis secondary to carcinoma of sigmoid
8. Aspirin poisoning
9. Open wound of wrist with tendon involvement
10. Previous cesarean section
11. Acute appendicitis with peritonitis
12. Dislocation of temporomandibular joint, compound
13. Vomiting
14. Hirsutism
15. Cicatrix of arm secondary to a 3rd degree burn
16. Hyperchlorhydria due to emotional stress
17. Class III Papanicolaou smear
18. Laboratory examination
19. Postpartum observation
20. Dumdum fever

EXERCISE III--CODING

Terms		Answers
Jejunal ulcer with perforation and hemorrhage	_____	542.3
Gastritis, acute, corrosive, due to lye	_____	960.8
Transverse spinal sclerosis	_____	357.3
Trigeminal neuralgia	_____	361.
Brachial neuritis	_____	362.
Chorioretinitis	_____	376.2
Ulcer of right cornea	_____	381.
Prolapse of iris	_____	388.5
Amblyopia	_____	389.1
Labyrinthitis	_____	394.0
Acute coronary occlusion	_____	420.1
Myocardial ischemia	_____	420.3
Congestive heart failure	_____	434.1
Dissecting aneurysm	_____	451.0
Gangrene of leg, etiology undetermined	_____	455.0
Hypotension	_____	467.0
Tonsillitis due to streptococcus	_____	051.
Pneumonia of newborn	_____	763.
Stricture of cervix	_____	633.6
Hypertension during pregnancy	_____	642.0
Placenta previa	_____	643.
Ectopic pregnancy with rupture of tube	_____	645.
Therapeutic abortion	_____	650.1

Exercise III (Continued)

Terms		Answers
Delivery complicated by postpartum hemorrhage	_____	672.1
Delivery complicated by cephalopelvic disproportion	_____	674.0
Delivery complicated by precipitate labor	_____	678.1
Delivery complicated by obstetrical shock	_____	678.5
Cystitis of puerperium	_____	681.0
Puerperal pulmonary embolism	_____	684.
Cellulitis of forearm	_____	692.2
Eczema, allergic, due to contact with skin	_____	703.9
Dermatitis due to adhesive plaster	_____	703.3
Erythema multiforme	_____	705.1
Pityriasis rosea	_____	706.2
Hirsutism	_____	713.1
Decubitus ulcer	_____	715.1
Cicatrix of trunk due to burn	_____	(716.0) (942.9)
Rheumatoid arthritis of spine	_____	722.1
Acute osteomyelitis	_____	730.0
Herniation of nucleus pulposus	_____	735.
Ankylosis of left ankle	_____	737.7
Ganglion of tendon sheath	_____	741.
Contracture of palmar fascia	_____	744.7
Hallux valgus	_____	747.0
Hydrocephalus, congenital	_____	752.
Patent ductus arteriosus	_____	754.1

Exercise III (Continued 2)

Terms		Answers
Coarctation of aorta	_____	754.7
Tracheoesophageal fistula, congenital	_____	756.0
Supernumerary fingers	_____	758.8
Greenstick fracture of proximal end of radius	_____	813.0
Compound fracture neck of humerus	_____	812.1
Compound fracture of lumbar vertebra	_____	805.5
Comminuted fracture of 7,8,9 ribs, left	_____	807.0
Compound fracture of acetabulum	_____	808.1
Compound fracture medial condyle left tibia	_____	823.1
Dislocation temporomandibular joint	_____	830.0
Dislocation of astragalus	_____	837.
Sprain acromioclavicular joint	_____	840.

EXERCISE IV--CODING

Terms		Answers
Talipes pes cavus	_____	748.2
Colles Fracture, greenstick	_____	813.4
Sprain of ankle	_____	845.0
Contusion of kidney	_____	866.0
Poisoning due to lead	_____	961.1
Urticaria due to tetracycline	_____	(243.) (963.5)
Pregnancy, uterine, delivered at home (admitted to hospital following)	_____	Y07.
Term birth, twins, low forceps, mate stillborn	_____	Y23.1
Lobotomy	_____	01.1
Neurolysis of peripheral nerve	_____	05.6
Removal of retained placenta	_____	77.0
Cesarean Section, low cervical	_____	78.1
Closed reduction of mandible with wiring	_____	24.9
Anastamosis of hepatic duct to stomach	_____	53.2
Resection of exteriorized intestine	_____	46.7
Umbilectomy	_____	41.6
Radical mastectomy	_____	38.3
Herniorrhaphy for recurrent inguinal hernia	_____	40.1
Laryngectomy	_____	22.2
Dacryocystorhinostomy	_____	18.3
Cyclodialysis	_____	15.6
Paracentesis of iris	_____	15.0
Resection of recti muscle	_____	11.2

Exercise IV (Continued)

Terms		Answers
Enucleation of eyeball	_____	10.4
Excision of thyroglossal cyst	_____	08.4
Otoplasty	_____	20.2
Radical mastoidectomy	_____	20.7
Rhinoplasty	_____	21.4
Sinusotomy with Caldwell-Luc	_____	21.6
Laryngotracheotomy	_____	22.0
Extraction of tooth, simple	_____	24.1
Removal of calculus from salivary gland	_____	25.1
Glossectomy	_____	26.1
Tonsillectomy	_____	27.1
Tonsillectomy and Adenoidectomy	_____	27.2
Arteriotomy of great vessel, Intrathoracic	_____	31.0
Thoracentesis	_____	34.1
Complete lobectomy	_____	35.3
Biopsy of breast	_____	38.8
Repair of diaphragmatic hernia, thoracic approach	_____	40.8
Celiotomy	_____	41.1
Pyloromyotomy	_____	44.1
Gastroduodenostomy with partial gastrectomy	_____	44.2
Excision of Meckel's diverticulum	_____	46.2
Total colectomy	_____	46.5
Colostomy	_____	47.1
Enteroenterostomy	_____	47.3

Exercise IV (Continued 2)

Terms		Answers
Abdominoperineal resection	_____	48.2
Closure of fistula in ano	_____	49.5
Evacuation of thrombosed hemorrhoids	_____	49.9
Menisectomy	_____	83.5
Arthroplasty of hip	_____	84.0
Arthrodesis of ankle	_____	84.5
Transplantation of pollicus longus tendon	_____	85.5
Amputation of hand and forearm	_____	87.2
Thrombectomy of peripheral vessels	_____	88.0
Ligation and stripping of varicose veins	_____	88.4
Gynecological implant of radium	_____	95.4
Myelography	_____	92.1
Partial ostectomy	_____	80.2
Refracture (surgical) for faulty union	_____	81.2
Closed reduction of shaft of femur	_____	82.0
Open reduction of extremity of femur with internal fixation	_____	82.5
Open reduction of Colles fracture without internal fixation	_____	82.4
Open reduction of shaft of femur with internal fixation	_____	82.2

EXERCISE V--INDEXING

Please Index the Following on Appropriate Card:

		Answers
Tuberculous abscess of lung	_____	002-019
Tuberculous necrosis of bone	_____	"
Compound fracture of cervical vertebra	_____	800-826
Depressed fracture of acetabulum	_____	"
Greenstick fracture proximal end of radius	_____	"
Dislocation of mandible	_____	830-839
Dislocation of proximal end of femur	_____	"
Sprain of tibiofibular joint	_____	840-848
Lumbosacral strain	_____	"
Concussion	_____	850-856
Traumatic pneumothorax	_____	860-869
Traumatic pneumothorax with open wound in thorax	_____	"
Contusion of kidney	_____	"
Laceration of cornea	_____	870-898
Laceration of scalp	_____	850-856
Basal Cell carcinoma of upper lip	_____	140-148
Adenocarcinoma of nasopharynx	_____	"
Carcinoma of stomach	_____	150-159
Carcinoma insitu of cervix	_____	170-181
Adenocarcinoma of bladder	_____	"
Glioblastoma of brain	_____	190-199
Acute gangrenous appendicitis with perforation	_____	550-553
Intussusception of appendix	_____	"

Exercise V (Continued)		Answers
Inguinal hernia, incarcerated	_____	560-561
Esophageal hiatus hernia	_____	"
Regional ileitis	_____	570-578
Paralytic ileus	_____	"
Cirrhosis of liver due to alcohol	_____	580-587
Gingivitis, ulcerative	_____	530-539
Maxillary sinusitis	_____	510-527
Bronchitis, acute	_____	500-502
Lobar pneumonia due to staphlococcus	_____	490-493
Varicose ulcer of leg	_____	460-468
Hypertensive cardiovascular disease	_____	442-443
Hypertensive heart disease with arteriolar nephrosclerosis	_____	"
Hypertensive vascular disease	_____	446-447
Arteriosclerotic heart disease	_____	420-422
Acute coronary occlusion	_____	"
Coronary insufficiency	_____	"
Rheumatic fever	_____	400-402
Chronic rheumatic heart disease	_____	410-416
Meniere's Disease	_____	390-398
Otitis media, acute	_____	"
Pterygium, left eye	_____	380-389
Mature cataract, right eye	_____	"
Detachment of retina	_____	"
Sciatica, right hip	_____	360-369
Sciatica due to intervertebral disc	_____	730-738
Fibrocystic disease of breast	_____	620-626

Exercise V (Continued 2)		Answers
Gynecomastia	_____	620-626
Pyosalpinx	_____	"
Pyelitis of pregnancy	_____	640-649
Preeclampsia of pregnancy	_____	"
Threatened abortion	_____	"
Pregnancy, uterine, delivered without complications	_____	660-678
Pregnancy, uterine, delivered complicated by cephalopelvic disproportion	_____	660-678

Please Index the Following Operations:

Burr holes	_____	01-06
Lobectomy	_____	"
Cranioplasty	_____	"
Thyroidectomy	_____	08-09
Excision thyroglossal duct cyst	_____	"
Enucleation of eyeball	_____	10-18
Mastoidectomy	_____	20-22
Dilatation and Curettage following abortion	_____	76-78
Delivery by low forceps with episiotomy	_____	70-75
Salpingo-oophorectomy, bilateral	_____	"
Biopsy of ovary	_____	"
Hysterectomy, vaginal approach	_____	"
Transurethral resection of prostate	_____	60-69
Anastamosis of ureter	_____	"
= = = = = = = = = = = = = = = = = = = =		
Burn of right wrist, 2nd degree	_____	940-949
Non transport Accidents	_____	E888-E936
= = = = = = = = = = = = = = = = = = = =		

Exercise V (Continued 3)		Answers
Repair of recurrent inguinal hernia	_____	40-57
Vagotomy	_____	"
Appendectomy	_____	"
Biopsy of pancreas	_____	"
Biopsy of mandible	_____	80-87
Closed reduction of fractured tibia	_____	"
Biopsy of skin and subcutaneous tissue	_____	89
Cystoscopy	_____	90-99
Intravenous pyelography	_____	"
Term birth, living child, delivery by Section	_____	Y20-Y29
Cirrhosis of liver	_____	580-587

FINAL TEST
ICDA

Hypertrophic pyloric stenosis, congenital _____

Incisional hernia, irreducible _____

Cholecystitis with cholelithiasis _____

Acute pharyngitis, pneumococcal _____

Urticaria due to tomatoes _____

Pregnancy, uterine, delivered by low forceps _____

Term birth, living child (for this mother) _____

Pregnancy, uterine, delivery of twins, complicated by abnormality of bony pelvis _____

Baby 1. Term twin infant, stillborn due to difficult labor _____

Baby 2. Term birth, living twin _____

Pregnancy, uterine, delivered, previous C. Section _____

Term birth, living child (for this mother) _____

Transverse fracture, shaft of humerus _____

Open reduction with internal fixation (above) _____

Removal of Smith-Petersen nail from femur _____

Fracture, closed, radius and ulna, upper extremity _____

Open reduction of above without internal fixation _____

Leiomyosarcoma of uterus (corpus uteri) _____

Adenocarcinoma of cecum _____

Adenocarcinoma of Liver _____

Bronchopneumonia due to staphylococcus _____

Cystitis due to abortion _____

Prostatectomy, transurethral _____

Concussion due to fall at home _____

3rd degree burn of leg, due to explosion _____

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

I. Topic: Basic Principles of Standard Nomenclature.

II. Objectives: The objectives of this lesson are to acquaint medical record clerks in small hospitals with:

A. Basic understanding of the principles of SNOD.

B. Basic knowledge of the arrangement and contents of SNOD.

C. An understanding of the benefits to be gained by the hospital, the physicians, and the Medical Record Department by using a disease and operations code book.

D. An appreciation of diagnostic, operative, and physicians indexes with basic instruction in setting up these indexes and how to use them.

E. An appreciation of the importance of coding and indexing all diagnoses and all operations on each clinical record.

III. Activities and Procedures:

A. Purposes for using a disease and operative nomenclature.

B. Dual system of coding.

C. Derivation of code numbers.

D. Supplementary terms.

E. Presentation of examples and exercises.

IV. Assignment: Memorize the first digits of the topographical codes and procedural codes.

V. Bibliography:

Current Medical Terminology

"Efficiency in Hospital Indexing of the Coding Systems of the International Statistical Classification and Standard Nomenclature of Diseases and Operations," Journal of the American Association of Medical Record Librarians 30:95-111, 129, June, 1959.

Huffman, Edna K., Manual for Medical Record Librarians, Physicians' Record Co., Berwyn, 1962.

Knutti, Sarah H., "Precise Terminology," Hospitals 33:63, 66, November, 1959.

McGuire, Helen, "Service from Headquarters," Hospitals 32:26, 28, March, 1958.

STANDARD NOMENCLATURE OF DISEASES AND OPERATIONS

INCOMPLETE OR MASTER CODE NUMBERS--Certain master code numbers are given throughout the body of the nomenclature. These must not be confused with incomplete diagnoses.

Generally, master code numbers are found in the sections on regions (pages 122-130), skin (pages 131-142), the musculo-skeletal system (pages 146-174), the arteries (pages 216-219), the veins (pages 224-225), the lymphatic channels (page 234), and the lymph nodes (pages 235-236).

Master codes are recognizable by pyramids that take the place of digits. They begin with a digit or digits specifying the system, organ, or part involved in the topographical section of the code number and are followed by one or two pyramids and likewise in the etiological section.

There are two procedures for use with the incomplete or master code numbers.

1. COMPLETION — Insertion of the proper digit in the place of the pyramid.

   Example: "32▲-123 Tuberculosis of sinus (specify sinus)." The diagnosis stated on the medical record is "Tuberculosis of ethmoid sinus." One must refer to the topographical section 32 (accessory sinuses, page 22). The code number here for ethmoid sinuses is 323. Therefore, the completed code number is 323-123.

2. SUBSTITUTION — The digits in the master code numbers must never be changed, although sometimes substitutions must be made.

   Example: "13▲-401 Abrasion (specify region). The diagnosis on the medical record is "Abrasion of skin, right inguinal region." In the topographical section, inguinal region is 146. Here, the digit 4 is substituted for the digit 3. The completed code is 146-401.

OPEN-END CODE NUMBERS — Found only in the topographical section. They pertain to regional and general diseases involving more than one anatomical system.

Where open-end code numbers appear, the first digit is also replaced by a pyramid.

Example: ▲▲▲-011 Absence, congenital, of . . . (page 122). The diagnosis on the medical record is "Congenital absence of left forearm." The pyramids must be replaced by digits to represent the part or organ indicated. The topographical code for forearm is 083 (page 5). The completed code is 083-011.

BEHAVIOR OR MALIGNANCY CODE LETTERS--Behavior code letters are attached to the etiological numbers for neoplasma (new growths) in order to describe the histology of the tissue involved.

The behavior letters are listed at the end of category -8, etiological division, page 99.

Occasionally these letters appear as a part of the basic code number. To determine if a behavior code letter is a part of the basic code number, always refer to category -8 in the etiological division of SNOD, pp. 93-99. If the behavior code letter is listed there, it is a part of the basic code number and must be retained. NEVER DROP these letters--if dropped, the meaning will be changed.

Example: 814A Squamous cell papilloma (benign) (page 94)
814 Epidermoid cardinoma (malignant)

Whenever behavior letters do not appear as a part of the basic code number, physicians and pathologists are the only ones qualified to decide whether a code letter should be assigned.

The behavior letter I indicates the secondary or metastatic site to which the primary tumor has metastasized.

Example: Metastatic epidermoid carcinoma of the lungs
360-814I (shows metastasis to lungs)

Use of the behavior letter I when the basic code number already contains a behavior letter. The letter I follows the complete basic code number.

Example: Leiomyosarcoma of the uterus with metastasis to right ovary
788-866FI (shows metastasis to ovary)

When the basic code number does not contain a behavior letter but one has been assigned by the physician or pathologist, the behavior letter I follows the basic code number and the behavior letter assigned by the physician follows the letter I.

Example: Undifferentiated adenocarcinoma of the lungs with metastasis to the liver
680-8091IG

The decimal digit .0 indicates a primary tumor which has metastasized.

Example: Epidermoid carcinoma of the cervix with metastasis to the lungs

783-814.0 (shows primary cancer)
360-814I (shows metastatic site)

<u>It is necessary</u> to determine whether the behavior letter is a part of the basic code by referring to pages 72-78 <u>before</u> proceeding to code the disease.

DECIMAL DIGITS
(GENERALLY)

Decimals are added to code numbers to impart additional information not given in the basic code number. They are most frequently found in the Etiological Classification, however, they are found in system 2 in the Topographical Classification, page 21. The decimal digits found on page 21 indicate accessory structures to bones, joints, and muscles.

Example: Periostitis, acute of humerus
230.4-100 (page 149)
The decimal digit four indicates the periosteum.

Decimal digits added to etiological numbers indicate end results of disease processes. They mean practically the same in every category EXCEPT category -8 (see page 9--this exercise).

Example: Fistula of larynx due to infection
330-100.3 (page 183)
The decimal digit three indicates fistula.

Structural and functional changes indicated at the end of an etiological section may be used arbitrarily.

Example: Fistula of larynx due to infection
330-1x3

A good rule to follow is to use the complete code as in the first example of fistula of the larynx above. Use the "x" code when there is a need for two codes in order to express two decimal digits.

Example: Fistula of the larynx with cyst formation due to infection
330-1x3.8

The decimal digit .0 is also used to indicate chronicity.

Example: Pleurisy, acute 370-190
Pleurisy, chronic 370-190.0

DILATION AND CURETTAGE

The operative procedure, dilation and curettage, is coded 785-104.

The digit 4 in the third position indicates curettage. This code number is used when the procedure is not associated with pregnancy, removal of retained placenta, placental fragments, or membrane.

The operative procedure to terminate a pregnancy (therapeutic abortion) is coded 7x5-104.

This code must not be used for dilation and curettage for an incomplete abortion. In an incomplete abortion, the placenta and its membrane or their fragments are removed. Parts of the fetus or the entire fetus may be removed. Codes for removal of fetal structures are:

of embryo 790-12

of placenta fragment. 7942-12

of retained placenta. 794-12

of retained placenta and membrane . .7941-12

Correct coding of the above conditions is desired in order to furnish statistical information about pregnancy loses, etc., through the operative index.

The clinical entity for which the procedure was performed must be determined before you can accurately classify and code dilation and curettages.

BASIC HUMAN ANATOMY

BASIC HUMAN ANATOMY

I. Topic: Basic Human Anatomy.

II. Objectives: To present the basic elements of human anatomy.

III. Procedures and Activities: Lecture.

A. Introduction.

B. Regions and Landmarks of the Body.

C. The Brain.

D. The Heart.

E. Circulation.

F. Tracheobronchial Tree.

G. Lungs and Pleura.

H. Gastrointestinal Tract.

I. The Spleen.

J. Kidneys.

K. Endocrine Glands.

L. Pelvis.

M. Lymphatic System.

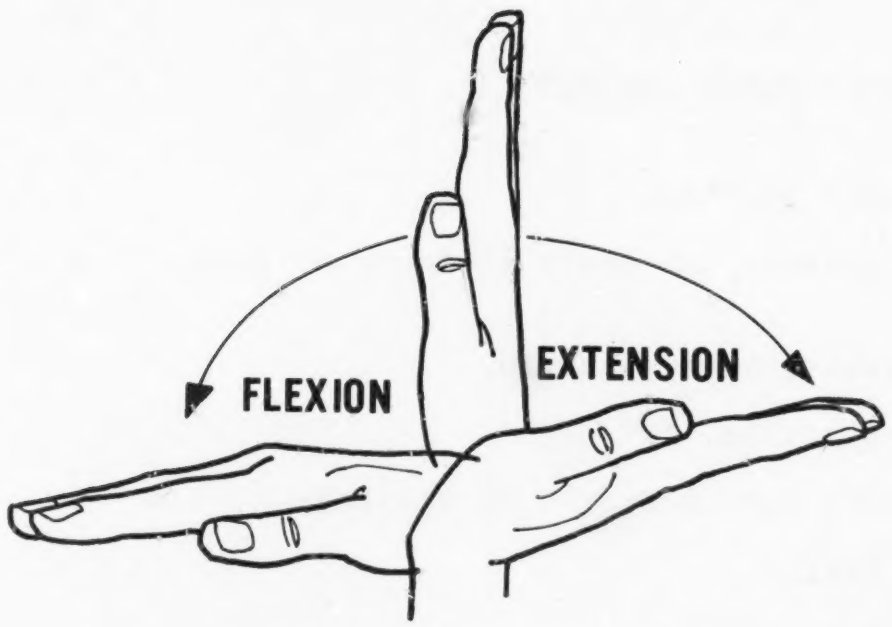
N. Blood.

IV. Materials and Resources: Movie, Models, Diagrams.

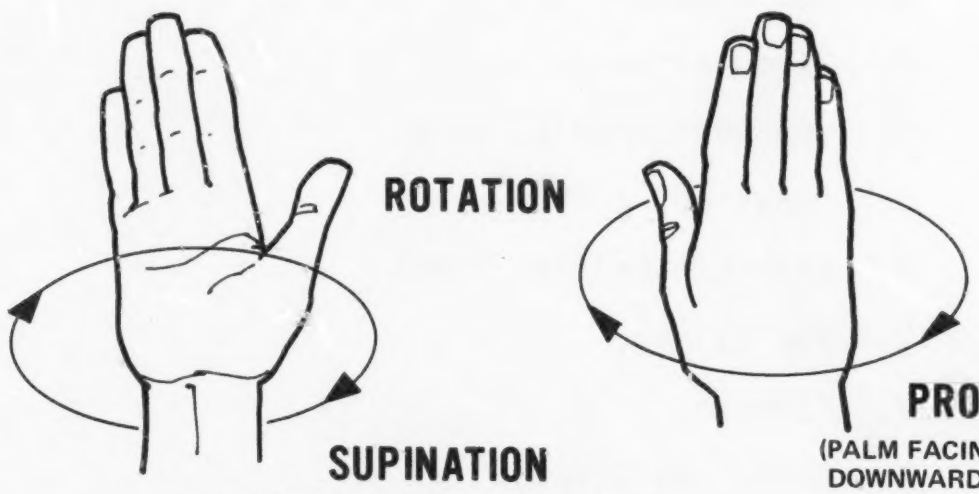
Grant, J. C. Boilean, A Method of Anatomy, 7th Ed., 1965, The Williams & Wilkins Co., Baltimore.

Steen, Edwin B., and Montague, Ashley, Anatomy & Physiology, Vols. 1 & 2, College Outline Series, Barnes & Noble, Inc., New York, 1959.

"Human Body: Circulatory System (14 min.), Digestive System (14 min.), Excretory System (14 min.), Respiratory System (14 min.), Skeleton (14 min.)," Mountain Plains Educational Media Council Film Catalog, 1966-68, University of Colorado, Boulder.


FLEXION
EXTENSION

EXTENSION
FLEXION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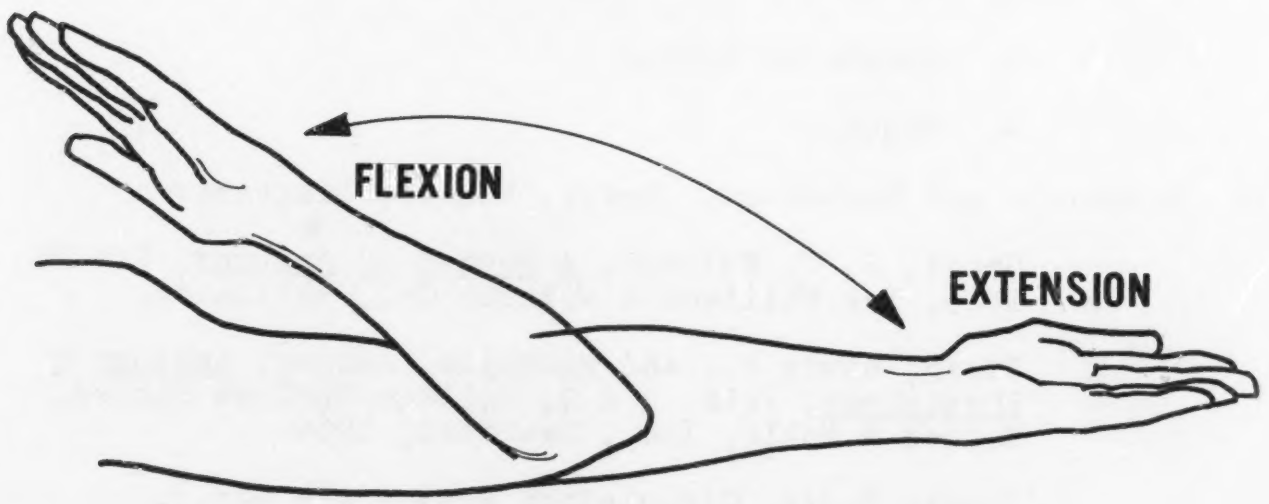
SUPINATION
(PALM FACING UPWARD - ANTERIOR)
PRONATION
(PALM FACING
DOWNWARD - POSTERIOR)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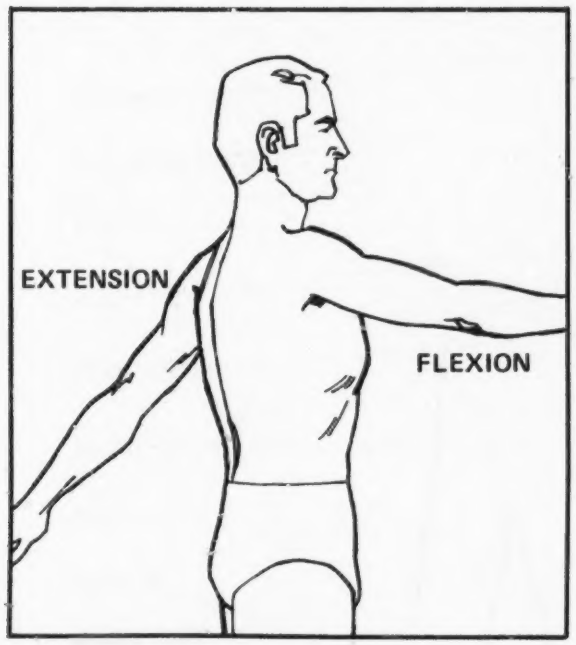
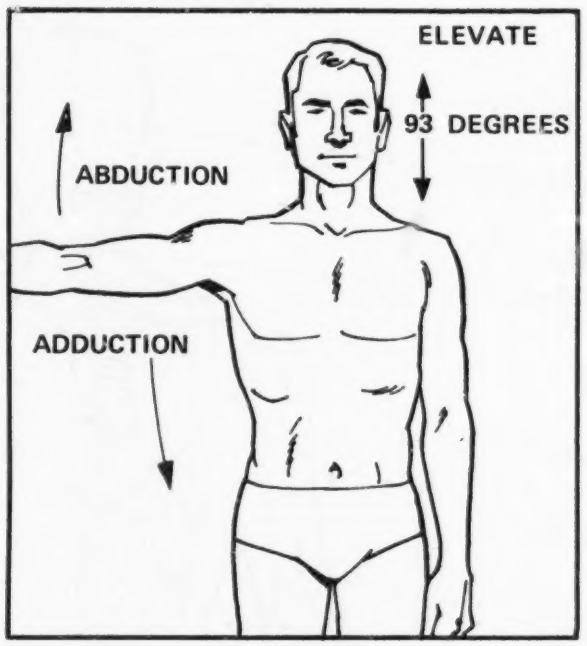
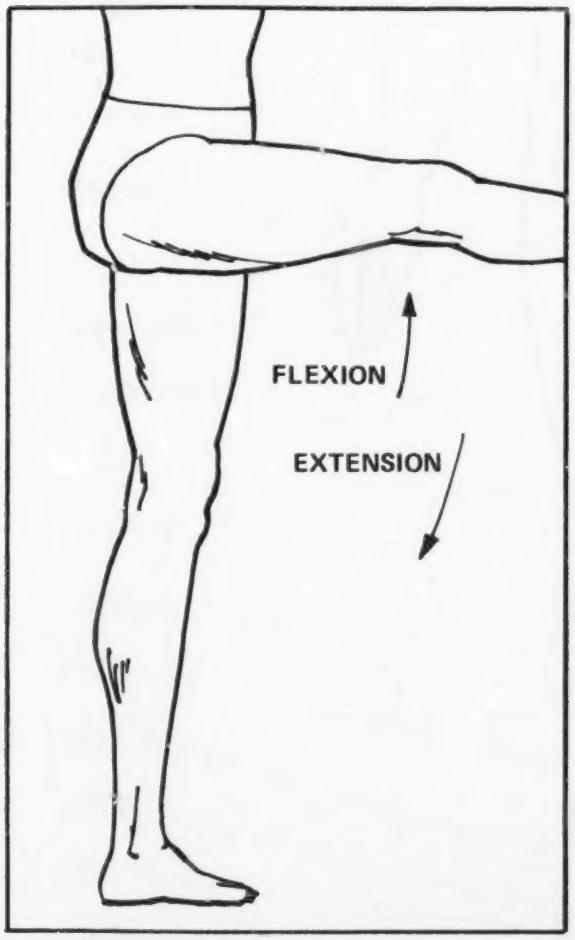
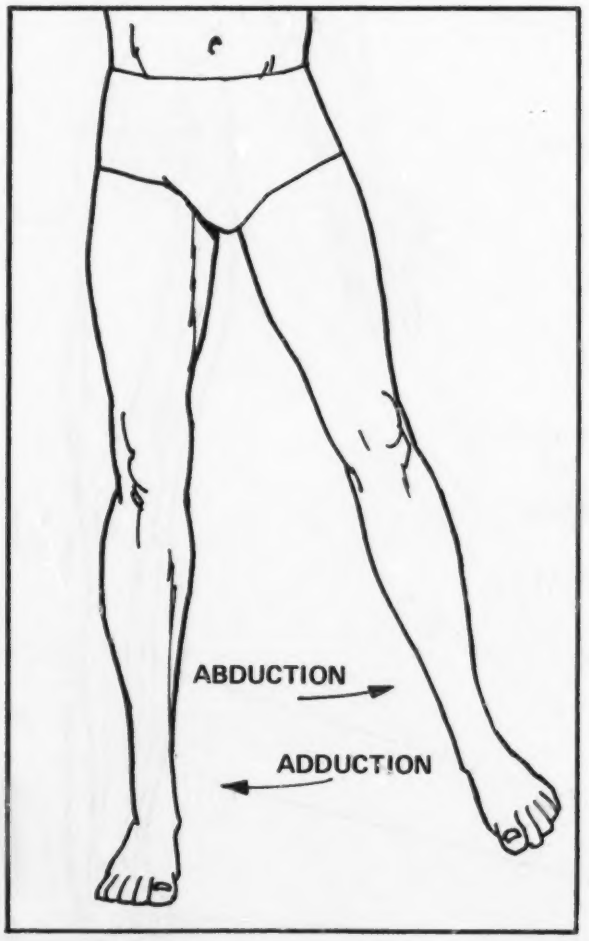
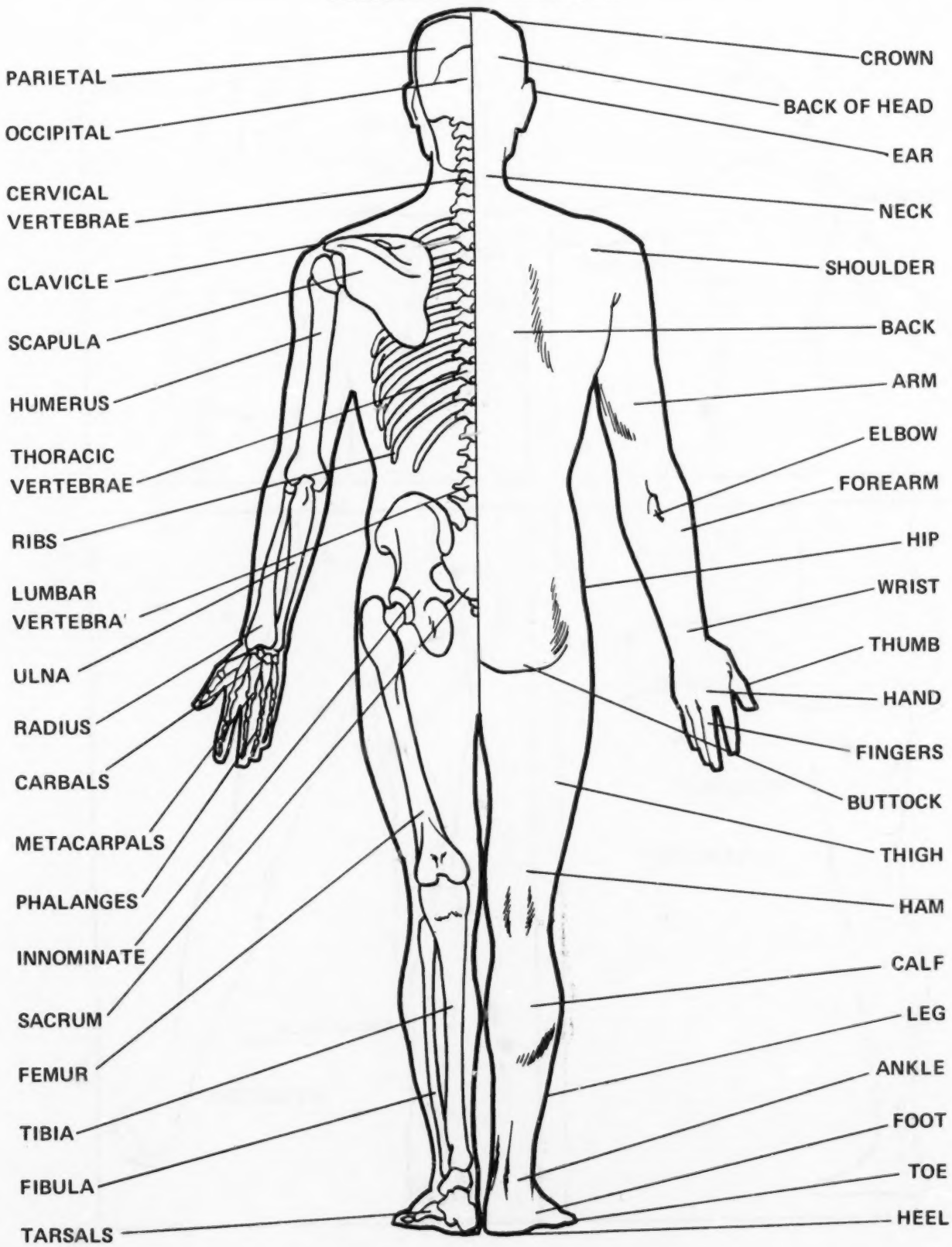

EXTENSION
FLEXION

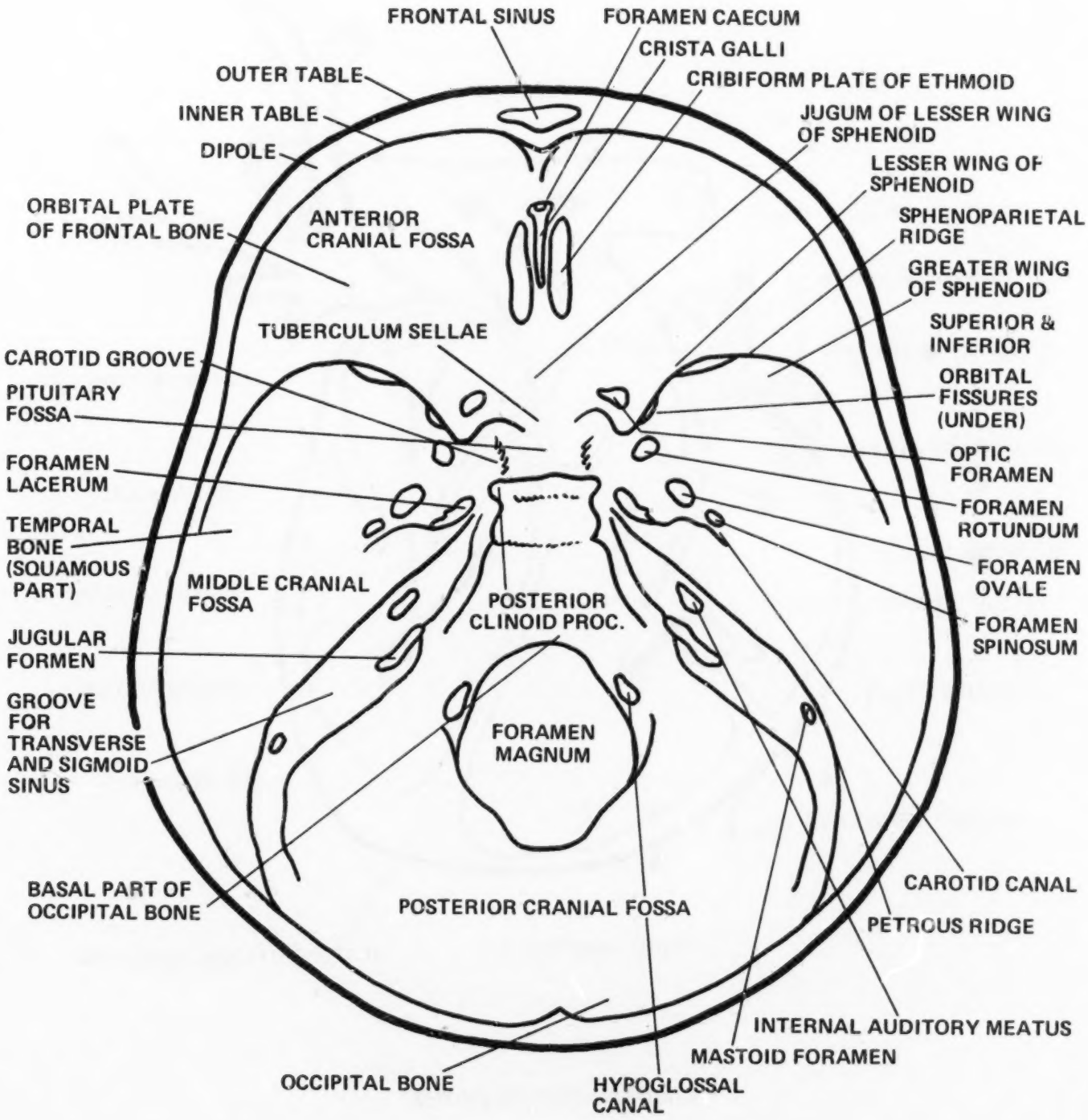

ELEVATE
93 DEGREES
ABDUCTION
ADDUCTION


FLEXION
EXTENSION

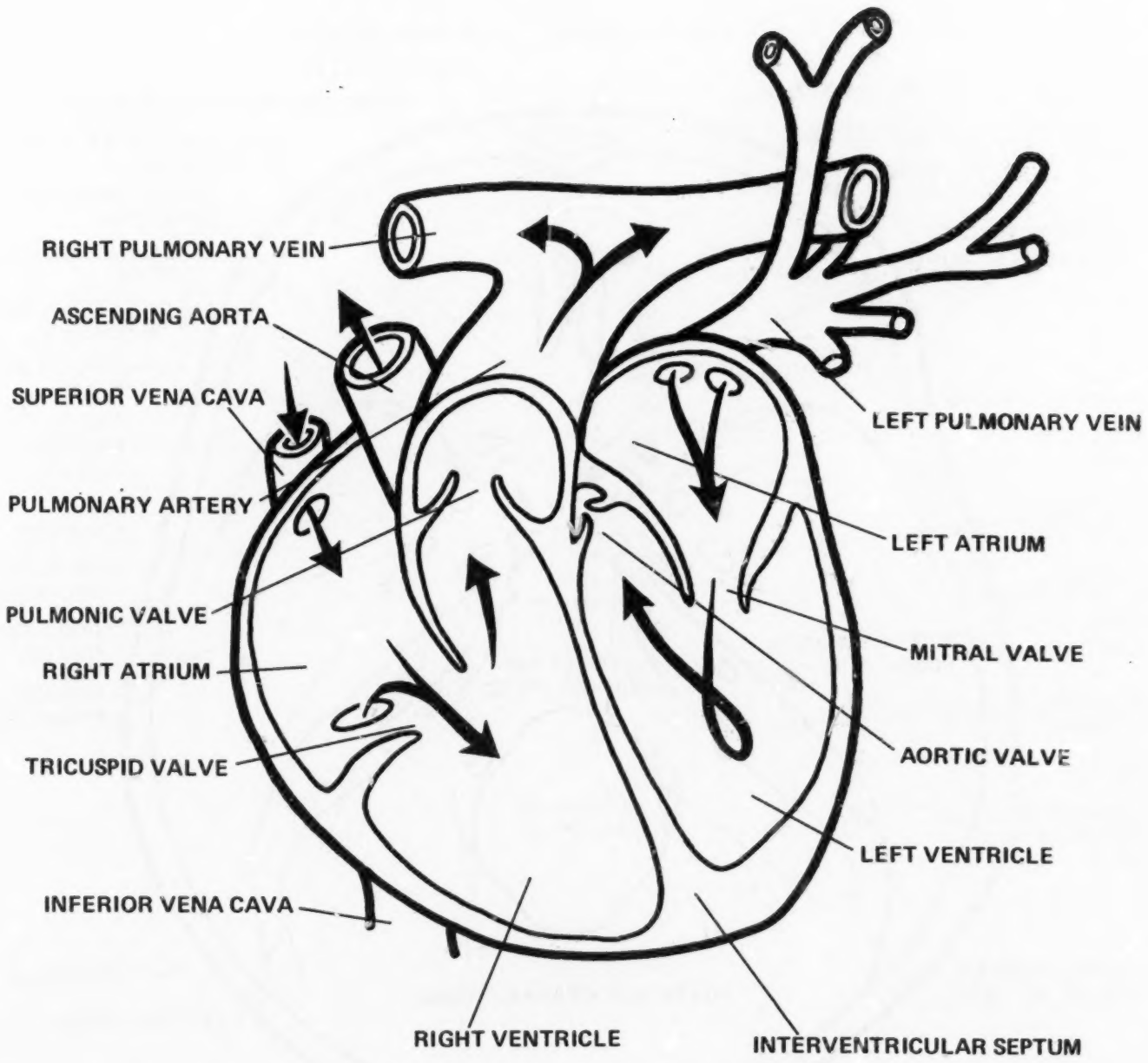

ABDUCTION
ADDUCTION

MUSCULO-SKELETAL SYSTEM

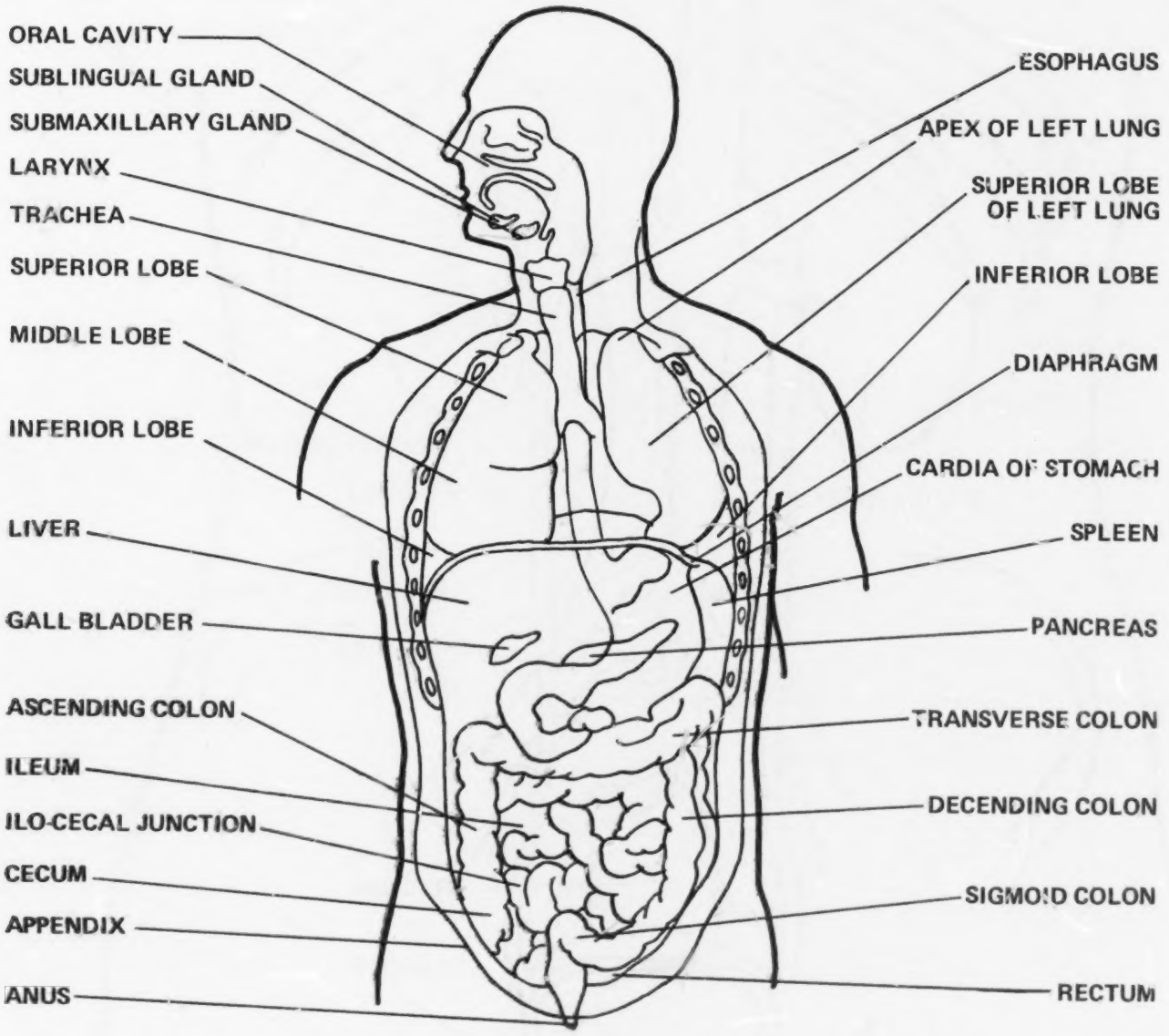




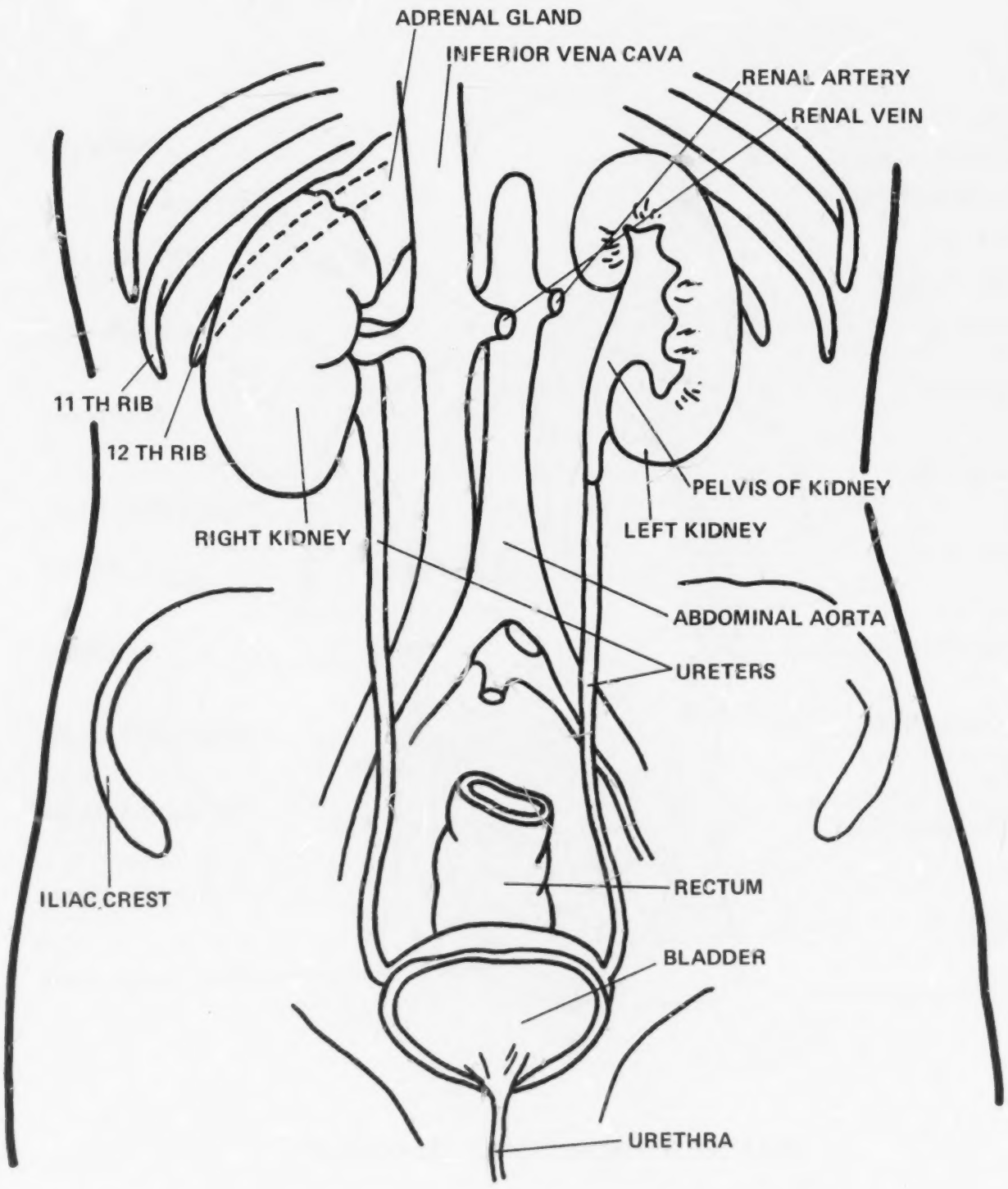
CROSS VIEW OF THE SKULL



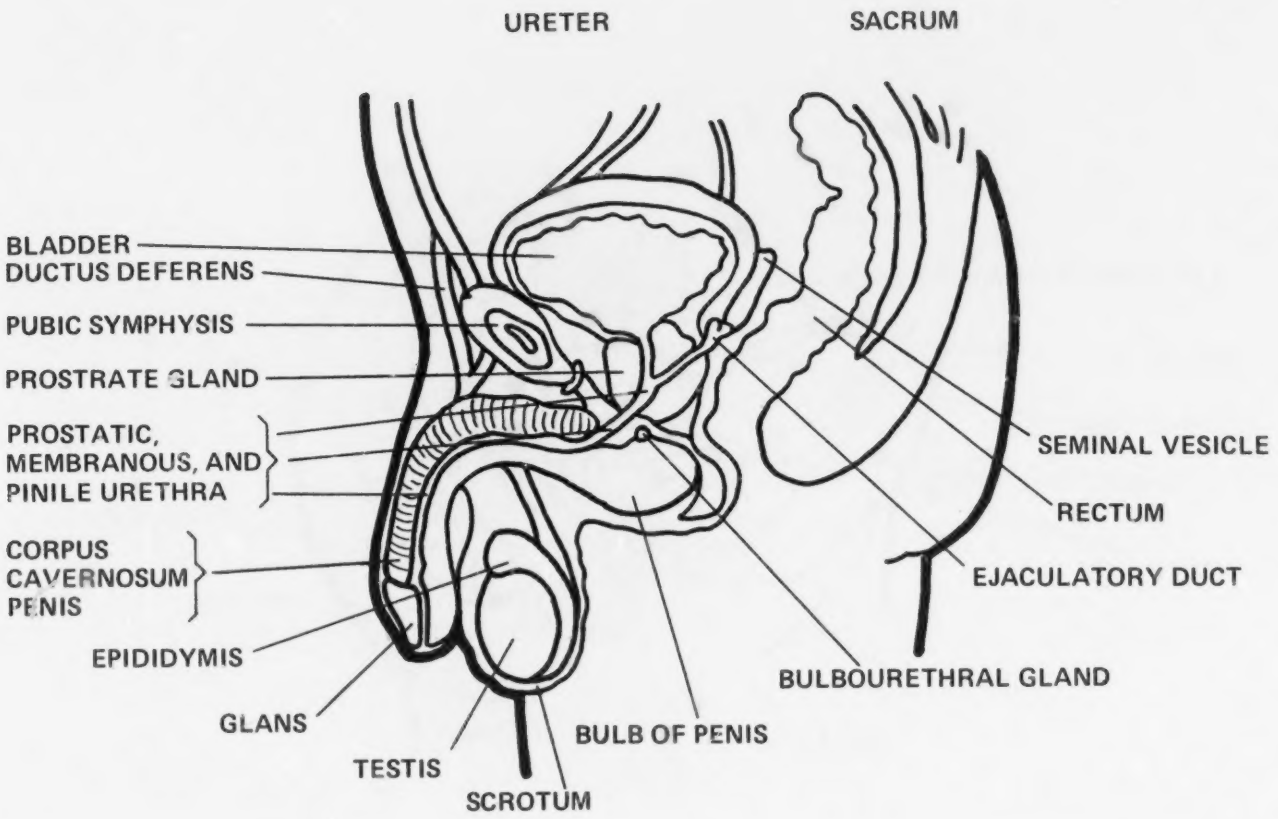
CARDIOVASCULAR SYSTEM



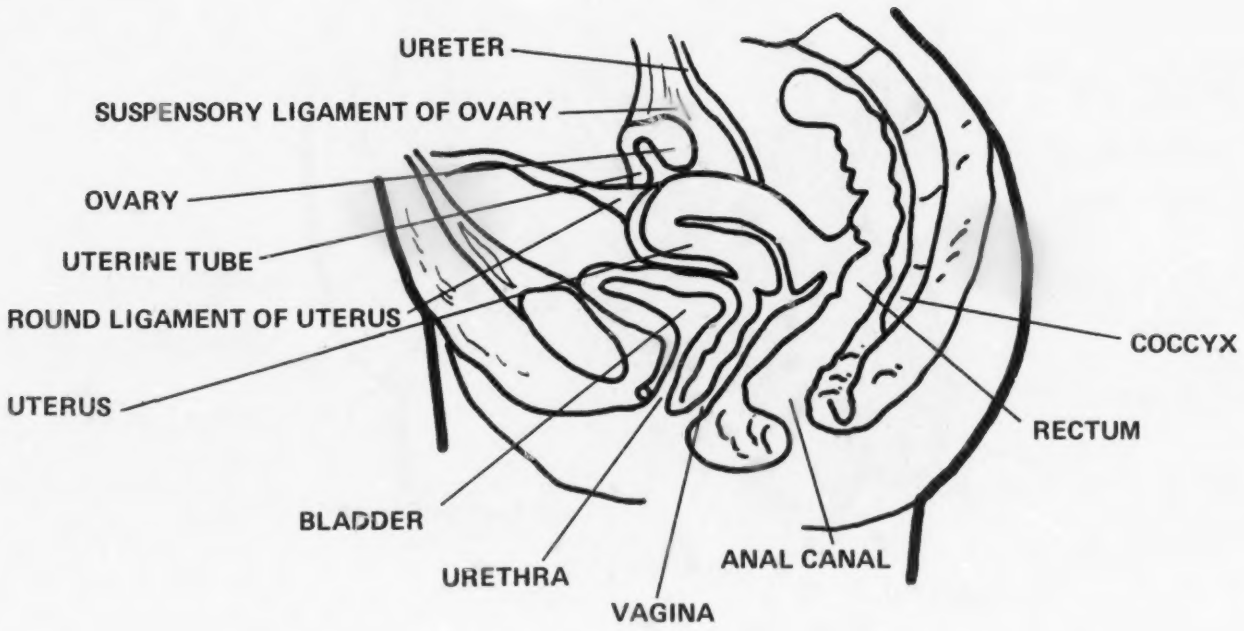
DIGESTIVE SYSTEM AND ASSOCIATED ORGANS


ADRENAL GLAND
INFERIOR VENA CAVA
RENAL ARTERY
RENAL VEIN
11 TH RIB
12 TH RIB
RIGHT KIDNEY
PELVIS OF KIDNEY
LEFT KIDNEY
ABDOMINAL AORTA
URETERS
ILIAC CREST
RECTUM
BLADDER
URETHRA

MALE REPRODUCTIVE SYSTEM



FEMALE REPRODUCTIVE SYSTEM



MEDICAL TERMINOLOGY

MEDICAL TERMINOLOGY

I. Topic: Medical Terminology.

II. Objectives:

A. To acquire the ability to pronounce and spell medical words.

B. To develop knowledge of the elements of medical words.

C. To acquire the ability to recognize word parts and to detect meanings of unfamiliar medical words.

D. To use a medical dictionary intelligently.

III. Activities and Procedures:

A. Lecture on word building.

1. Discussion of contents found in frames 1-88. The program and the word-building system. Words formed by:

a. Word root--foundation of the word.
b. Compound words can be formed when two word roots are used to build words.
c. Combining form--root word plus a vowel.
d. Prefix--the word part that goes before a word to change its meaning.
e. Suffix--the word part that follows a word root.

2. Unusual letter combinations.

a.	pn - n	pneumonia
b.	ch - k	chemistry; cheiloplasty
c.	gn - n	gnat; gnathalgia = na-thal' ge-ah
d.	ph - f	phobia; diphtheria
e.	ps - s	psittacosis; psychosis
f.	rh - r	rhonchus
g.	cn - n	cnemis = ne'mis
h.	pt - t	ptosis

3. Knowledge of singular and plural endings peculiar to Greek and Latin words will prevent many errors. Some common ones are:

Singular		Plural	
a	axilla	ae	axillae
ax	thorax	aces	thoraces
is	diagnosis; crisis	es	diagnoses; crises
ma	myoma; fibroma	mata	fibromata; myomata (also fibromas)

Singular		Plural	
on	phenomenon; ganglion	a	phenomena; ganglia
nx	phalanx; larynx	ges	phalanges; larynges
um	antrum; septum	a	antra; septa
us	bacillus; bronchus	i	bacilli, bronchi

B. Drill using programmed text.

C. Classroom drills and reviews.

1. Emphasis will be on the meaning of prefixes, roots, and suffixes.

2. Analysis of the basic structures of medical words.

3. Reference to medical dictionary for new words--pronunciation, spelling, analysis, and definition.

4. Students will be required to memorize some of the most common components.

5. Application of acquired knowledge by combining forms and building medical words.

D. Written test exercises.

IV. Materials, Resources, and Bibliography.

A. Textbook: Smith, Genevieve L. and Davis, Phyllis E., Medical Terminology, A Programed Text, 2nd Ed., John Wiley and Sons, New York, 1967.

B. Overhead projector and transparencies of oral drills.

C. Bibliography:

Bollo, Louise E., Introduction to Medicine and Medical Terminology, W. B. Saunders Co., Philadelphia, 1961.

Dorland, William A., Illustrated Medical Dictionary, 24th Ed., W. B. Saunders Co., Philadelphia, 1965.

Harned, Jessie M., Medical Terminology Made Easy, Physicians' Record Co., Berwyn, 1951.

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Frenay, Mary, Understanding Medical Terminology, 3rd Ed., Catholic Hospital Association, St. Louis, 1964.

Szulec, Jeannette A., A Syllabus for the Surgeon's Secretary, 1st Ed., Medical Art Publishing Co., Detroit, 1965.

Tabor, Clarence W., Cyclopedic Medical Dictionary, F. A. Davis Co., Philadelphia, 1965.

V. Assignment: Textbook.

Frames 88-664

Exercises	#1	88-524
	#2	oral spelling
	#3	525-711
	#4	spelling and definitions
Urinary system		612-634

Frames 665-1245

Digestive system		664-711
Exercises	#5	712-875
	#6	spelling and definitions
	#7	875-1083
	#8	1084-1246

Frames 1247-1397

Respiratory system		1272-1293
Exercise	#9	1232-1397
Skeletal system		1354-1390
Exercise	#10	spelling and analyzing 1013-1353

Frames 1398-1535

Organs of special senses
Cardiovascular terms
Female genital system

LIST OF ABBREVIATIONS

Abbreviations	Meaning
$\overline{AA}$, $\overline{aa}$	of each
a.c.	before meals
ACTH	adrenocorticotrophic hormone
A.D.	right ear (auris dextra)
add.	let there be added
ad lib.	at pleasure; at discretion
A.F.	acid-fast
A/G ratio	albumin-globulin ration
A.H.A.	American Hospital Association
A.J.	ankle jerk
Alb.	albumin
Alt. dieb.	every other day (alternis diebus)
Alt. hor.	every other hour (alternis hour)
Alt. noct.	every other night (alternis noctibus)
A.M.	before noon (ante meridiem)
Anes.	anesthesia
Ante	before (ante)
$A_2 \rangle P_2$	Aortic 2nd heart sound greater than pulmonic 2nd sound
$A_2 \langle P_2$	Aortic 2nd heart sound less than pulmonic 2nd sound
aq.	water
aq. dist.	distilled water
a.s.	left ear (auris sinistra)
A.T.S.	antitetanic serum
A.V.	auriculoventricular
A.Z. Test	Aschheim Zondek test
Bact.	bacterium
Ba. enem.	barium enema
Bib.	drink
b.i.d.	twice a day (bis in die)
B.M.	bowel movement
B.M.R.	basal metabolic rate
B.P.	blood pressure
B.P.H.	benign prostatic hypertrophy
b.s.	breath sounds
c̄	with
Ca	carcinoma
c.b.c.	complete blood count
cc	cubic centimeters
C.C.	chief complaint
cf.	compare

C.I.	color index
cm.	centimeter
C.M.	tomorrow morning (cras mane)
C.N.	tomorrow night (cras nocte)
C.N.S.	central nervous system
C.P.C.	clinical pathological conference
C.S.F.	cerebrospinal fluid
C.V.	tomorrow night (cras vespere)
C.V.A.	Cerebrovascular accident or Costo-vertebral angle
D & C	dilation and curettage
decub.	lying down (decubitus)
De d. in d.	from day to day (de die in diem)
Dieb. alt.	on alternate days (diebus alternis)
Dieb. tert.	every third day (diebus tertiis)
D.O.A.	dead on arrival
dr.	dram
Dx	diagnosis
ECG or EKG	electrocardiogram
E.D.C.	estimated date of confinement
EEG	electroencephalogram
E.E.N.T.	eye, ear, nose, and throat
E.N.T.	ear, nose, and throat
E.O.M.	extraocular movements
E.S.R.	erythrocyte sedimentation rate
F.H.	family history
F.H.S.	fetal heart sounds
Fl., fld.	fluid
G.B.	gallbladder
GC	gonorrhea
G.E.	gastroenterology
G.I.	gastrointestinal
gm.	gram
G.P.	general practitioner
gr.	grain
gt., gtt.	drop; drops
G.U.	genitourinary
Gyn	gynecology
h.	hour
Hb., Hbg.	hemoglobin
H.d., h.s.	at bedtime
H.C.V.D.	hypertensive cardiovascular disease
/HPF	per high power field
H.V.D.	hypertensive vascular disease
I.M.	intramuscular
In d.	daily

Int. Med.	Internal Medicine
I.Q.	intelligence quotient
I.S.	intercostal space
I.V.	intravenous
I.V.P.	intravenous pyelogram
k.j.	knee jerk
k.k.	knee kick
K.U.B.	kidney, ureter, and bladder
L.	liter
L_1; L_2	1st lumbar vertebra; 2nd lumbar vertebra
L.B.D.	left border of dullness (of heart to percussion)
L.C.M.	left costal margin
L.L.Q.	left lower quadrant
L.M.D.	local medical doctor
L.M.P.	last menstrual period
L.O.A.	left occipito-anterior
L.S.K.	liver, spleen, and kidneys
L. & W.	living and well
McB. pt.	McBurney's point
MCH	mean corpuscular hemoglobin
MCHC	mean corpuscular hemoglobin concentration
MCV	mean corpuscular volume
mg.	milligram
M.I.	mitral insufficiency
mm.	millimeter
M.S.	mitral stenosis
N.P.N.	nonprotein nitrogen
O.B.; Ob.; Obs.	obstetrics
O.D.	right eye (oculus dexter)
O.S.	left eye (oculus sinister)
℥	ounce
P. & A.	percussion and auscultation
Para I	A woman having borne one child
PA	pernicious anemia
pc.	after meals
P.E.; Px	physical examination
P.H.	past history
Phys. Med.	physical medicine
P.I.	present illness
P.I.D.	pelvic inflammatory disease
P.M.I.	point of maximal impulse (of heart on chest wall)
P.M.N.	polymorphonuclear neutrophilic leukocytes
p.r.n.	whenever necessary
prog.	prognosis
P.S.P.	phenolsulfonphthalein test (kidney)
Psy.	psychiatry
Psych.	psychology

Pt.	patient
P.T.	physical therapy
quotid	daily
q.	every
q.d.	every day (quaque die)
q.h.	every hour (Quaque hora)
q.i.d.	four times a day (quater in die)
q. 2h	every 2 hours
q.n.	every night (quaque nocte)
q.s.	sufficient quantity
q.n.s.	quantity not sufficient
R.B.C.	red blood cells
R.L.Q.	right lower quadrant
R.R.&E.	round, regular, and equal (of pupils)
$\bar{s}$	without
$\bar{ss}$	one half
sig.	let it be labeled
Sp.gr.	specific gravity
S.R.	sedimentation rate (C.S.R.-corrected sedimentation rate)
SS;ss	one half
Tss	one and one half
Stat.	at once
Stet.	let it stand
T.P.R.	temperature, pulse, respiration
T.A.T.	tetanus antitoxin
T.B.; t.b.; Tbc	tuberculosis; tubercle bacilli
T.F.	tactile fremitus
T.I.D.; t.i.d.	three times a day (ter in die)
Tr.; tr.	tincture
V.D.	venereal disease
V.D.H.	valvular disease of heart
V.F.	vocal fremitus
WBC	white blood cells (white blood count)

ABBREVIATIONS

Abbreviations	Meaning
A.A.M.R.L.	American Association of Medical Record Librarians
A.M.A.	American Medical Association
A.H.A.	American Hospital Association
F.A.C.S.	Fellow, American College of Surgeons
F.A.C.P.	Fellow, American College of Physicians
F.A.C.H.A.	Fellow, American College of Hospital Administrators
U.S.P.	United States Pharmacopeia
U.S.P.H.S.	United States Public Health Service
$AgNO_3$	silver nitrate
ASA	aspirin (acetylsalicylic acid)
CO_2	carbon dioxide
H_2O	water
HCl	hydrochloric acid
$KMnO_4$	potassium permanganate
K	potassium
KI	potassium iodide
NaCl	sodium chloride (common salt)
N_2O	nitrous oxide
NH_4Cl	ammonium chloride
O_2	oxygen
$(C_2H_5)_2O$	ethyl ether
C_2H_5Cl	ethyl chloride
C_3H_6	cyclopropane

MEDICAL TERMINOLOGY

EXERCISE I

Build a word that means:

1. enlargement of the extremities
2. condition of blueness
3. skin that is abnormally white
4. record of electrical impulses given off by heart
5. inflammation of the stomach
6. vomiting excessively
7. excision of a gland
8. tumor containing fat
9. another name for the mucosa
10. overdevelopment
11. brain tumor
12. surgical repair of a joint
13. resembling or like a tooth
14. movement toward a midline
15. herniation of the bladder
16. process of taking pelvic measurements
17. inflammation of the meninges
18. producing pus or formation of pus (noun)
19. wandering away from (the normal course)
20. abnormally slow eating
21. bone tumor
22. pertaining to ribs
23. toothache
24. pertaining to abdomen and bladder
25. the instrument used to take pelvic measurements

MEDICAL TERMINOLOGY

EXERCISE I--ANSWERS

1. acromegaly
2. cyanosis
3. leukoderma (IA)
4. electrocardiogram
5. gastritis
6. hyperemesis
7. adenectomy
8. lipoma
9. mucous membrane
10. hypertrophy
11. encephaloma; cerebroma
12. arthroplasty
13. dentoid
14. adduction
15. cystocele
16. pelvimetry
17. meningitis
18. pyogenesis
19. aberrant
20. bradyphagia
21. osteoma
22. costal
23. dentalgia; dentodynia
24. abdominocystic
25. pelvimeter

MEDICAL TERMINOLOGY

EXERCISE II--ORAL SPELLING

Spell and Give a Brief Meaning for 25 Words

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.
23.
24.
25.

MEDICAL TERMINOLOGY

EXERCISE II--ORAL SPELLING ANSWERS

1. cephalodynia
2. gastromegaly
3. hypodermic
4. carcinoma
5. gastroduodenostomy
6. laryngalgia
7. leukocytopenia
8. dermatosis
9. acroparalysis
10. adenoma
11. lipoid
12. cephalic
13. duodenal
14. acrodermatitis
15. chondrocostal
16. osteomalacia
17. costectomy
18. tachycardia
19. cholecystitis
20. abdominocentesis
21. thoracotomy
22. hydrocephalus
23. suprapubic
24. staphylococcus
25. kinesiology

MEDICAL TERMINOLOGY

EXERCISE III

Build a word that means:

1. breathing with difficulty
2. spasm of a muscle
3. destruction of spermatozoa
4. incision into an eyelid
5. surgical repair of the renal pelvis
6. tumor containing black pigment
7. resembling a fungus
8. biting of the lips
9. inflammation of the gums
10. inflammation of the colon
11. breathing rapidly
12. spasm of a vessel
13. suture of the kidney
14. prolapse of an eyelid
15. inflammation of the renal pelvis
16. cell containing black pigment
17. study of fungi
18. incision of the lips
19. excision of part of the gums
20. plastic repair of the rectum

MEDICAL TERMINOLOGY

EXERCISE III--ANSWERS

1. dyspnea
2. myospasm
3. spermatolysis
4. blepharotomy
5. pyeloplasty
6. melanoma; melanocarcinoma
7. mycoid; fungoid
8. cheilophagia
9. gingivitis
10. colonitis; colitis
11. tachypnea
12. angiospasm
13. nephrorrhaphy
14. blepharoptosis
15. pyelitis
16. melanocyte
17. mycology
18. cheilotomy
19. gingivectomy
20. rectoplasty

MEDICAL TERMINOLOGY

EXERCISE IV--ORAL SPELLING

25 WORDS GIVEN ORALLY

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MEDICAL TERMINOLOGY

EXERCISE IV--ORAL SPELLING ANSWERS

SPELL AND ANALYZE THE FOLLOWING WORDS:

1. bradypepsia
2. neurectomy
3. angiography
4. agenesis
5. hematology
6. hysterosalpingo-oophorectomy
7. hepatorrhaphy
8. pancreatectomy
9. nephropexy
10. urethrospasm
11. pneumorrhagia
12. pneumothorax
13. hypoglossal
14. gastrectasia
15. rectoscopy
16. dyspepsia
17. neurolysis
18. urethrocystitis
19. enterocele
20. pancreatolithiasis
21. ureteropyeloplasty
22. gastrorrhagia
23. cystorrhaphy
24. pneumonia
25. stomatodynia

MEDICAL TERMINOLOGY

EXERCISE V

Build a word that means:

1. surgical fixation of a vein
2. cocci that grow in pairs (double)
3. surgical crushing of a nerve
4. speech that is rapid
5. overdevelopment
6. abnormally small head (noun)
7. inflammation of many joints
8. an adjective which means living without oxygen
9. having an affinity for (attraction to) color
10. rupture of the liver
11. hardening of a vein
12. loss of voice
13. surgical crushing of a stone (calculus)
14. speech that is very slow
15. pertaining to heat (adjective)
16. inflammation of many nerves
17. abnormal fear of air
18. breathing with ease
19. excessive thirst
20. seeing two images of a single object
21. medical specialty that deals with the nervous system
22. underdevelopment
23. abnormally large head
24. very large cells
25. abnormally small ear

MEDICAL TERMINOLOGY

EXERCISE V--ANSWERS

1. phlebopexy
2. diplococcus
3. neurotripsy
4. tachyphasia
5. hyperplasia: hypergenesis: hypertrophy
6. microcephalus
7. polyarthritis
8. anaerobic
9. chromophilic (IA)
10. hepatorrhexis
11. phlebosclerosis
12. aphonia
13. lithotripsy
14. bradyphasia
15. thermal (IC)
16. polyneuritis
17. aerophobia
18. eupnea
19. polydipsia
20. diplopic; ambiopia
21. neurology
22. hypoplasia: hypogenesis: atrophy
23. macrocephalus
24. macrocytes
25. microtia

MEDICAL TERMINOLOGY

EXERCISE VI

SPELL AND BRIEFLY DEFINE 25 WORDS

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MEDICAL TERMINOLOGY

EXERCISE VI--ANSWERS

1. anesthesia
2. hyperalgesia
3. myelitis
4. phonic
5. psychoneurosis
6. prognosis
7. syndrome
8. anterolateral
9. analgesia
10. salpingitis
11. posterolateral
12. diagnosis
13. syndactyly
14. polyneuritis
15. cephalic
16. caudal
17. dystocia
18. neurorrhaphy
19. arteriosclerosis
20. stomatitis
21. esophagus
22. pyopneumothorax
23. hypertrophy
24. eupnea
25. aerophobia

MEDICAL TERMINOLOGY

EXERCISE VII

1. incision into the abdominal wall
2. prolapse of viscera
3. excessive sweating
4. abnormal fear of women
5. control (of flow) in arteries
6. surgical fixation of the vagina
7. having water removed from something (noun)
8. out of the normal place
9. fever
10. without fever
11. suture of the vagina
12. any disease peculiar to women
13. excessive menstruation or menstrual hemorrhage
14. painful menstruation
15. white blood cell
16. red blood cell
17. unequality in size of the cells
18. instrument used for examination of interior of the eye
19. word for undescended testicle
20. inflammation of the vagina
21. an adjective meaning within the cranium
22. situated behind the colon
23. word for turning forward
24. a woman who has borne more than one child
25. excision of the uterus
26. enlargement of the spleen

MEDICAL TERMINOLOGY

EXERCISE VII--ANSWERS

1. laparotomy
2. visceroptosis
3. hidrorrhea: hyperhidrosis
4. gynecophobia: gynephobia
5. arteriostasis
6. colpopexy
7. dehydration
8. ectopic
9. febrile
10. afebrile
11. colporrhaphy
12. gynecopathy
13. menorrhagia
14. dysmenorrhea
15. leukocyte
16. erythrocyte
17. anisocytosis
18. ophthalmoscope
19. cryptorchidism
20. colpitis: vaginitis
21. endocranial
22. retrocolic
23. anteversion
24. multipara
25. hysterectomy
26. splenomegaly

MEDICAL TERMINOLOGY

EXERCISE VIII

Give the word part for the following:

1. testes
2. fixation
3. hidden
4. dilatation
5. single
6. pus
7. blood
8. self
9. liver
10. around
11. behind-backward
12. misplaced
13. uterus
14. outer
15. middle
16. inner
17. hemorrhage
18. flow
19. suture
20. pain
21. eat
22. cartilage
23. sleep
24. fingers-toes
25. toward
26. from
27. incision
28. excision
29. formation of a communication
30. surgical fixation
31. surgical fusion
32. suture
33. crushing
34. to view
35. destruction
36. over-upon
37. against
38. together
39. above
40. ovary
41. fallopian tube
42. skin
43. pain
44. new
45. before
46. behind
47. within
48. under
49. below
50. outside of or beyond

MEDICAL TERMINOLOGY

EXERCISE VIII--ANSWERS

1. testes. . .orchid
2. fixation. . .pexy
3. hidden. . .crypt
4. dilatation. . .ectasia
5. single. . .uni
6. pus. . .py
7. blood. . .hemo: hemato
8. self. . .auto
9. liver. . .hepato
10. around. . .peri
11. behind-backward. . .retro
12. misplaced. . .ectop
13. uterus. . .hyster
14. outer. . .ecto
15. middle. . .meso
16. inner. . .endo
17. hemorrhage. . .orrhagia
18. flow. . .orrhea
19. suture. . .orrhaphy
20. pain. . .dynia: algia
21. eat. . .phag
22. cartilage. . .chondr
23. sleep. . .narco
24. fingers-toes. . .dactyl
25. toward. . .ad
26. from. . .ab; de; ex
27. incision. . .otomy
28. excision. . .ectomy
29. formation of a communication . . . ostomy
30. surgical fixation. . .pexy
31. surgical fusion. . .desis
32. suture. . .orrhaphy
33. crushing. . .paxy: tripsy
34. to view. . .oscopy
35. destruction. . .lysis
36. over-upon. . .epi
37. against. . .anti
38. together. . .syn: con
39. above. . .supra
40. ovary. . .oophor
41. fallopian tube. . .salping
42. skin. . .derm: dermato
43. pain. . .algia: dynia
44. new. . .neo
45. before. . .ante: pre
46. behind. . .retro
47. within. . .endo
48. under. . .sub: hypo: infra
49. below. . .sub: hypo: infra
50. outside of or beyond: around or near. . .para

MEDICAL TERMINOLOGY

EXERCISE IX

BUILD A WORD THAT MEANS:

1. excision of the cervix
2. instrument to examine the larynx
3. inflammation of the pharynx
4. spasm of the larynx
5. examination of the bronchus
6. puncture of the pleura
7. controlling flow of blood
8. pertaining to the nose
9. originating in the bronchus
10. situated within the cranium
11. within the substance of a muscle
12. situated behind the nose
13. without fever
14. occurring before childbirth
15. occurring after birth

FORM THE PLEURALS OF THE FOLLOWING:

16. appendix
17. vertebra
18. cortex
19. apex
20. thorax
21. bronchus
22. bacterium
23. rhabdomyosarcoma
24. naris
25. prognosis

MEDICAL TERMINOLOGY

EXERCISE IX--ANSWERS

BUILD A WORD THAT MEANS:

1. excision of the cervix. . .cervicectomy
2. instrument to examine the larynx. . .laryngoscope
3. inflammation of the pharynx. . .pharyngitis
4. spasm of the larynx. . .laryngospasm
5. examination of the bronchus. . .bronchoscopy
6. puncture of the pleura. . .pleurocentesis: thoracocentesis: thoracentesis
7. controlling flow of blood. . .hemostasis: hemotostasis
8. pertaining to the nose. . .nasal: rhinal
9. originating in the bronchus. . .bronchogenic
10. situated within the cranium. . .intracranial
11. within the substance of a muscle. . .intramuscular
12. situated behind the nose. . .postnasal
13. without fever. . .afebrile
14. occurring before childbirth. . .antepartum
15. occurring after birth. . .postnatal

FORM THE PLEURALS OF THE FOLLOWING:

16. appendix. . .appendices
17. vertebra. . .vertebrae
18. cortex. . .cortices
19. apex. . .apices
20. thorax. . .thoraces
21. bronchus. . .bronchi
22. bacterium. . .bacteria
23. rhabdomyosarcoma. . .rhabdomyosarcomata
24. naris. . .nares
25. prognosis. . .prognoses

MEDICAL TERMINOLOGY

EXERCISE X--SPELLING

SPELL THE WORD, DRAW LINES INDICATING THE WORD PART, AND GIVE BRIEF DEFINITION.

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MEDICAL TERMINOLOGY

EXERCISE X--SPELLING ANSWERS

1. aseptic
2. necrosis
3. narcolepsy
4. exacerbation
5. antipyretic
6. auscultation
7. contraindication
8. percussion
9. splenectomy
10. symphysis
11. analgesia
12. apnea
13. epigastrium
14. inflamed
15. bifurcation
16. dissection
17. euphoria
18. adduct
19. abduct
20. circumoral
21. suprapubic
22. semiconscious
23. dystrophy
24. consanguinity
25. ankyloglossia

MEDICAL TERMINOLOGY

EXERCISE XI--SKELETAL SYSTEM

GIVE THE MEDICAL TERM FOR THE FOLLOWING:

1. breast bone_____
2. collar bone_____
3. shoulder bone_____
4. cheek bone_____
5. shin bone_____
6. thigh bone_____
7. wrist bones_____
8. ankle bones_____
9. upper arm bone_____
10. knee cap_____
11. upper jaw bone_____
12. lower jaw bone_____
13. bones of the fingers and toes_____
14. a rounded process that occurs on many bones_____
15. the lower posterior bone of the pelvis_____

LABEL THE ABOVE MEDICAL TERMS ON THE SKELETAL DRAWING IN YOUR BOOK.

Note: See Plate XL, Dorland's Illustrated Medical Dictionary, 24th Ed., p. 1395.

MEDICAL TERMINOLOGY

EXERCISE XI--ANSWERS

GIVE THE MEDICAL TERM FOR THE FOLLOWING:

1. breast bone . . .sternum
2. collar bone . . .clavicle
3. shoulder bone . . .scapula
4. cheek bone . . .malar: zygomatic
5. shin bone . . .tibia
6. thigh bone . . .femur
7. wrist bones . . .carpals
8. ankle bones . . .tarsals
9. upper arm bone . . .humerus
10. knee cap . . .patella
11. upper jaw bone . . .maxilla
12. lower jaw bone . . .mandible
13. bones of the fingers and toes . . .phalanges
14. a rounded process that occurs on many bones . . .condyle
15. the lower posterior bone of the pelvis . . .ischium

REVIEW EXERCISE

MEDICAL TERMINOLOGY--URINARY SYSTEM

ANATOMICAL TERMS

1.	KIDNEY. . .NEPHR:REN	2 bean-shaped organs situated in lumber region--secretes urine.
2.	RENAL PELVIS. . .PYEL	Basin of the kidney. Funnel-shaped enlargement as it enters the kidney.
3.	URETER	Tube which conveys the urine from kidney to the bladder.
4.	BLADDER. . .CYST:VESIC	Reservoir for the urine.
5.	URETHRA	The canal which conveys the urine from the bladder to the exterior of the body.
6.	TRIGONE	A triangular area on the interior of the bladder at the opening of the ureters and the mouth of the urethra.

SYMPTOMATIC TERMS: GIVE THE MEANING OF THE FOLLOWING:

ANURIA_____

ALBUMINURIA_____

PYURIA_____PAINFUL OR DIFFICULT URINATION_____

BLOOD IN THE URINE_____SUGAR IN THE URINE_____

PASSAGE OF LARGE AMOUNTS OF URINE_____

EXCESSIVE URINATION AT NIGHT_____

DIAGNOSTIC TERMS

INFLAMMATION OF THE URETER_____OF BLADDER_____

INFLAMMATION OF THE URETHRA_____OF TRIGONE_____

ACCUMULATION OF PUS IN THE URETER_____

ABNORMAL DISTENTION OF THE URETER WITH URINE OR WITH A WATERY DISCHARGE_____

STONE IN THE BLADDER_____IN URETER_____

HARDENING OF THE KIDNEY_____RENAL CALCULI_____

INFLAMMATION OF THE PELVIS OF THE KIDNEY_____

ANY DISEASE OF THE KIDNEY_____TUMOR OF THE KIDNEY_____

DOWNWARD DISPLACEMENT OF THE KIDNEY_____

INFLAMMATION OF THE RENAL PELVIS AND KIDNEY_____

REVIEW EXERCISE

MEDICAL TERMINOLOGY--DIGESTIVE SYSTEM

PRINCIPAL ORGANS OF THE DIGESTIVE SYSTEM: GIVE THE ROOT WORD.

1. MOUTH_____
2. PHARYNX_____
3. ESOPHAGUS_____
4. STOMACH_____
5. INTESTINES_____
6. RECTUM_____
7. GALLBLADDER_____
8. LIVER_____
9. PANCREAS_____
10. SALIVARY GLANDS_____
11. APPENDIX_____
12. ANUS_____

GIVE THE MEANING OF THE FOLLOWING WORD PARTS:

13. CHEIL_____
14. GLOSS_____
15. ODONT_____
16. DENT_____
17. SIAL_____
18. PTYAL_____
19. LITHIASIS_____
20. LABI_____
21. GINGIV_____
22. DOCH_____
23. ANGI_____
24. COLO_____
25. PHAGIA_____
26. EMESIS

27. THE SPECIALIST IN THIS FIELD IS_____
28. THE SEROUS MEMBRANE WHICH LINES THE ABDOMINAL WALL AND INVESTS THE VISCERA IS_____

DIVIDE THE WORDS BELOW AND GIVE MEANING OF WORD PARTS:

29. HEMATEMESIS_____
30. PYLOROSPASM_____
31. GASTROCOLITIS_____
32. CHOLECYSTITIS_____
33. HEPATOMEGALY_____
34. ENTEROPTOSIS_____
35. ANOREXIA_____
36. DYSPHAGIA_____

MEDICAL TERMINOLOGY--DIGESTIVE SYSTEM (continued)

DIVIDE THE WORDS BELOW AND GIVE BRIEF MEANING:

37. BRADYPHAGIA_____
38. ENTERIC_____
39. ENTEROCELE_____
40. CHOLANGITIS_____
41. CHOLECYSTOLITHIASIS_____
42. GASTROSCOPE_____
43. ILEOCOLITIS_____
44. DUODENUM_____
45. DYSPEPSIA_____
46. GLOSSALGIA_____
47. STOMATITIS_____
48. PANCREATOLYSIS_____
49. MACROGLOSSIA_____
50. ENTEROPTOSIS_____
51. PROCTOLOGIST_____

GIVE THE MEDICAL TERM FOR THE FOLLOWING:

52. PLASTIC REPAIR OF THE LIPS AND MOUTH_____
53. SUTURE OF THE LIVER_____
54. INCISION INTO THE INTESTINES_____
55. EXCISION OF THE STOMACH_____
56. MAKING A COMMUNICATION BETWEEN THE ESOPHAGUS AND DUODENUM_____
57. EXCISION OF THE GALLBLADDER_____
58. REMOVAL OF STONES FROM THE GALLBLADDER_____
59. SUTURE OF THE TONGUE_____
60. PLASTIC REPAIR OF THE ANUS_____
61. SURGICAL CREATION OF AN OPENING BETWEEN TWO PARTS OF THE ILEUM_____

REVIEW EXERCISE

MEDICAL TERMINOLOGY--RESPIRATORY SYSTEM

GIVE THE ROOT WORD FOR THE FOLLOWING ORGANS OF THE RESPIRATORY SYSTEM, BRIEFLY DEFINE:

NOSE_____
LARYNX_____
TRACHEA_____
BRONCHUS_____
LUNGS_____
PLEURA_____

GIVE THE MEANING OF THE WORD PARTS:

OSMIA_____
HEMO_____
PNEA_____
SEPT_____
PHON_____
DYS_____
EU_____
CYAN_____
PTYAL_____
PNEUMO_____

GIVE THE MEDICAL TERMINOLOGY FOR THE FOLLOWING:

A COLLECTION OF PUS AND AIR OR GAS IN THE PLEURAL CAVITY_____

_____

INFLAMMATION OF THE BRONCHUS_____

INFLAMMATION OF THE LARYNX, TRACHEA, AND BRONCHUS_____

DIFFICULT OR LABORED BREATHING_____

EASY OR NORMAL BREATHING_____

DIFFICULTY IN SPEAKING_____

DISCHARGE OF THIN NASAL MUCUS_____

NOSEBLEED_____

SPITTING OF BLOOD_____ VOMITING OF BLOOD_____

LOSS OF VOICE_____ BLUENESS OF THE SKIN_____

A NASAL STONE_____ PERTAINING TO LARYNX_____

STRICTURE OR NARROWING OF THE BRONCHIAL TUBES_____

INSTRUMENT FOR VIEWING THE INTERIOR OF THE BRONCHUS_____

REVIEW EXERCISE

MUSCULOSKELETAL SYSTEM

GIVE THE MEDICAL WORD PART FOR THE FOLLOWING:

1. BONE_____
2. MARROW_____
3. MUSCLE_____
4. JOINT_____
5. CARTILAGE_____
6. TENDON_____

GIVE A BRIEF MEANING OF THE FOLLOWING WORDS:

7. ANKYLOSIS_____
8. BURSITIS_____
9. CHONDROMA_____
10. HEMARTHROSIS_____
11. ARTHRALGIA_____
12. MYOSITIS_____
13. KYPHOSIS_____
14. LORDOSIS_____
15. SCOLIOSIS_____
16, ENDOSTEUM_____
17. PERIOSTEUM_____
18. OSTEOMYELITIS_____
19. SEQUESTRUM_____
20. ARTHROPATHY_____

SURGICAL TERMS:

21. ARTHRODESIS_____
22. CHONDROTOMY_____
23. MYORRHAPHY_____
24. OSTECTOMY_____
25. SEQUESTRECTOMY_____

REVIEW EXERCISE

ORGANS OF VISION

WORD ROOTS

BLEPHAR	EYELID	OCUL	EYE
CORNE	CORNEA	OPHTHALM	EYE
CILIA	EYELASH	OPT, OPIA	VISION
COR, CORE	PUPIL	OPS	SIGHT
CYCL	CILIARY BODY	PHAK	LENS
DACRY, LACRIM	TEAR	RETIN	RETINA
DACRYADEN	TEAR GLAND	SCLERA	HARD
DACRYCYST	TEAR SAC		
KERAT	CORNEA		

GIVE THE MEDICAL WORD FOR THE FOLLOWING:

1. INFLAMMATION OF THE IRIS_____
2. INFLAMMATION OF THE IRIS AND CILLIARY BODY_____
3. DIMNESS OF VISION_____
4. DOUBLE VISION_____
5. PROTRUSION OF THE EYEBALL_____
6. FARSIGHTEDNESS_____
7. NEARSIGHTEDNESS_____
8. INFLAMMATION OF A LACRIMAL GLAND_____
9. INFLAMMATION OF A LACRIMAL SAC_____
10. DROOPING OF THE EYELID_____
11. INFLAMMATION OF THE CONJUNCTIVA_____
12. RESEMBLING THE RETINA_____
13. INFLAMMATION OF THE CORNEA_____
14. PROLAPSE OF THE IRIS_____
15. PRESENCE OF CALCULI IN A TEAR DUCT_____
16. EXCESSIVE FLOW OF TEARS_____
17. REMOVAL OF A LACRIMAL SAC_____
18. SUTURE OF AN EYELID_____
19. PLASTIC REPAIR OF RETINA_____
20. INSTRUMENT FOR INCISING THE CORNEA_____

REVIEW EXERCISE

ORGAN OF HEARING

AUR	EAR	OT	EAR
MYRING	EARDRUM	SALPING	TUBE
TYMPAN	EARDRUM		

GIVE THE MEANING OF THE FOLLOWING:

1. OTITIS MEDIA_____
2. OTITIS EXTERNA_____
3. MYRINGITIS_____
4. TYMPANIC_____
5. OTOGENOUS_____
6. IMPACTED CERUMEN_____
7. TINNITUS_____
8. OTONEURALGIA_____
9. HELIX_____
10. OTOPYOSIS_____
11. AURICLE, PINNA_____
12. MACROTIA_____
13. MICROTIA_____
14. PREAURICULAR_____
15. TYMPANOTOMY_____
16. MYRINGOMYCOSIS_____
17. VERTIGO_____

REVIEW EXERCISE

CARDIOVASCULAR SYSTEM

GIVE THE MEANING OF THE FOLLOWING WORD PARTS:

CARDI_____ BLAST_____

COR_____ CYTE_____

ANGI_____ HEM_____

ARTER_____ HEMAT_____

ERYTHR_____ EMIA_____

LEUK_____ OSIS_____

PHAG_____ PENIA_____

GIVE THE MEANING OF THE FOLLOWING WORDS:

ENDOCARDIUM_____

MYOCARDIUM_____

PERICARDIUM_____

SEPTUM_____

ATRIUM OR AURICLE_____

VENTRICLE_____

ARRHYTHMIA_____

BRADYCARDIA_____

TACHYCARDIA_____

PALPITATION_____

THROMBUS_____

EMBOLUS_____

STENOSIS_____

DEXTROCARDIA_____

HYPERTROPHY OF THE HEART_____

CARDIOMEGALY_____

CARDIOMALACIA_____

AUSCULTATION_____

PERCUSSION_____

REVIEW EXERCISE

CARDIOVASCULAR SYSTEM (continued)

RALES_____

SYSTOLIC_____

DIASTOLIC_____

ACROCYANOSIS_____

ARTERIOSCLEROSIS_____

PHLEBITIS_____

THROMBOPHLEBITIS_____

CARDIORRHEXIS_____

AORTIC VALVULITIS_____

PYOPNEUMOTHORAX_____

HYDROTHROX_____

ANEURYSM_____

HEMOPERICARDIUM_____

LEUKOCYTOSIS_____

ANISOCYTOSIS_____

LEUKOCYTOPENIA_____

POIKILOCYTOSIS_____

BASOPHIL_____

ERYTHROCYTOSIS_____

ANOXEMIA_____

HYPOPROTEINEMIA_____

MICROCYTIC_____

ERYTHROBLASTOSIS FETALIS_____

NEUTROPHIL_____

MACROCYTE_____

REVIEW EXERCISE

MEDICAL TERMINOLOGY--FEMALE GENITAL SYSTEM

COLP	VAGINA	OOPHOR	OVARY
CERVIC	NECK	OO, OVI, OVO	EGG
TRACHEL	NECK	MENO	MONTH, MENSES
METRO	UTERUS	EPISIO	VULVA
HYSTER	UTERUS	SALPING	TUBE

ANATOMICAL TERMS

VULVA--the external genital organs of the female.
PERINEUM--the pelvic floor and associated structures occupying the pelvic outlet.
VAGINA--the canal in the female, extending from the vulva to the nect of the uterus.
CERVIX UTERI--the neck of the uterus.
ADNEXA--adjacent structures of the uterus. . .the ovaries and tubes.

OVIDUCTS, FALLOPIAN TUBES--the canals which convey the ova to the uterus.
PARAMETRIUM--tissue around the uterus.
ENDOMETRIUM--the mucous lining of the uterus.
MYOMETRIUM--the muscular coat of the uterus.

GIVE THE MEDICAL WORD FOR THE FOLLOWING

ABSENCE OF MENSTRUATION_____

PAINFUL MENSTRUATION_____

SCANTY MENSTRUATION_____

UTERINE BLEEDING_____

EXCESSIVE BLEEDING DURING MENSTRUATION_____

INFLAMMATION OF AN OVARY_____

ABNORMAL WHITISH DISCHARGE FROM THE VAGINA AND UTERINE CAVITY_____

COLLECTION OF WATERY FLUID IN THE UTERINE TUBE_____

COLLECTION OF PUS IN AN OVIDUCT_____

INFLAMMATION OF THE VAGINA_____

ENDOMETRIAL TISSUE OCCURRING ABERRANTLY IN VARIOUS LOCATIONS IN THE PELVIC CAVITY_____

INFLAMMATION OF FALLOPIAN TUBE AND OVARY_____

ANY UTERINE DISEASE_____

REVIEW EXERCISE

FEMALE GENITAL SYSTEM (continued)

EXCISION OF THE VAGINA_____

SUTURE OF THE PERINEUM_____

EXCISION OF THE UTERUS_____

SUSPENSION OR FIXATION OF A DISPLACED UTERUS_____

FALLING OR PROLAPSE OF THE UTERUS_____

EXCISION OF THE UTERUS, FALLOPIAN TUBE, AND OVARY_____

SURGICAL REMOVAL OF THE CERVIX_____

SUTURE OF A LACERATION OF THE NECK OF THE UTERUS_____

GIVE THE MEANING OF THE FOLLOWING:

ANTEFLEXION OF THE UTERUS_____

NULLIPARA_____

PRIMIPARA_____

PARA REFERS TO NUMBER OF_____

GRAVIDA PERTAINS TO THE NUMBER OF_____

DYSTOCIA_____

GESTATION_____

ANTEPARTUM_____

ECTOPIC PREGNANCY_____

CYSTADENOMA OF THE OVARY_____

COLPOPLASTY_____

HEMATOSALPINX_____

ATRESIA OF A FALLOPIAN TUBE_____

MENARCHE_____

PRURITUS VULVAE_____

PAPANICOLAOU SMEAR_____

CONTENT OF MEDICAL RECORDS

CONTENT OF MEDICAL RECORDS

I. Topic: Requirement and Content of Each Type of Record in General.

II. Objective: To gain a knowledge of the requirements for each type of record.

III. Activities and Procedures:

A. Introduction.

B. Size and color.

C. Joint Commission on Accreditation of Hospitals.

D. Combining forms.

E. Record control.

F. Assembly of the record.

G. Record forms.

H. Responsibility for content of the medical record.

I. Medical record department's responsibility for record content.

IV. Assignment: None.

V. References and Materials:

A. Transparencies.

1. WORD: "Quantitative Analysis."

2. WORD: "Qualitative Analysis."

3. Cartoon: "Measure Up or Drop Out."

4. Cartoon: "Medical Records Marching in to the Medical Record Department."

B. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Chicago, 1963, pp. 33-39; 493-494.

C. Sample forms.

CONTENT OF THE MEDICAL RECORD

I. Topic: Content for Each Type of Record.

II. Objectives: To acquire an understanding of the purpose of quantitative analysis.

To gain a knowledge of the requirements for each type of record (JCAH and individual hospitals).

Purpose of the quantitative analysis is to check for omission and discrepancies within the medical record and to draw these to the attention of the attending physician by means of the "THIS RECORD LACKS" checklist or refer the matter to the Medical Record Committee.

III. Activities and Procedures: Lecture.

A. Summary Sheet.

B. Consents.

C. Autopsy Findings.

D. History and Physical Examinations.

E. Consultations.

F. Laboratory Reports.

G. X-ray Reports.

H. Special Reports.

I. Anesthesia Reports.

J. Report of Operation.

K. Progress Notes and Summary.

L. Physicians' Orders.

M. Nurses' Notes.

N. Memoranda Slips.

O. Routing and Control Systems.

IV. Assignment: Read References and Work Problems.

V. References:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Ch. V., "Assisting the Physician," pp. 191-203; Ch. II, "The Medical Record," pp. 33-126; Ch. XIV, Section on Correction of Original Data, p. 446; Ch. XIV, Section on Consents, pp. 446-449; "Record Forms," pp. 493-494, Physician's Record Co., Berwyn, 1963.

Hospital Accreditation References, 1964 Ed., American Hospital Association, Chicago, 1964. (Section on Medical Record Department, pp. 101-118)

Bulletin #10, Standards for Hospital Accreditation, Joint Commission on Accreditation of Hospitals, Chicago, 1964.

Bulletin #17, Standards for Hospital Accreditation, Joint Commission on Accreditation of Hospitals, Chicago, 1964.

American Hospital Association, Medical Record Forms for Hospitals: Guide to Preparation, American Hospital Association, Chicago, 1963.

American Hospital Association, Guide to the Organization of a Hospital Medical Record Department, American Hospital Association, Chicago, 1962.

American Medical Association, The Wonderful Human Machine, American Medical Association, Chicago, 1967.

VI. Materials:

A. Transparencies.

1. Routing List.
2. Cartoon: "Signatures."
3. Outline: "Dictating Histories and Physicals."
4. Operative Report
5. Cartoon: "Typing Confidential Reports."
6. "This Record Lacks" Slip.
7. Routing List.

B. Fictitious Medical Record Case.

C. Problems.

RECORD CONTENT

QUANTITATIVE ANALYSIS OF THE MEDICAL RECORD--PART ONE
STUDENT OUTLINE

I. Definition of Quantitative Analysis (Huffman).

II. Purpose of Quantitative Analysis.

A. Deficiency check.

B. Source of Medical Statistics.

III. Requirements for each type of record.

A. History and Physical Examination.

1. Content: CC, PI, PH, FH, PX.

2. JCAH requirements; signatures, etc.

3. Medical Record Librarian's responsibility.

4. Attending physician's responsibility.

B. Summary Sheet.

1. Contents: provisional diagnosis, identification data, final diagnosis; associated diagnoses, complications or infections, operative procedures performed.

2. JCAH requirements; signatures.

3. MRL's responsibility.

4. Attending physician's responsibility.

5. Admitting officer's responsibility.

6. Summary note.

C. Report of Operation.

1. Contents.

2. JCAH requirements.

3. MRL's responsibility.

4. Surgeon's responsibility.

D. Anesthesia report.

1. Content.

2. MRL's responsibility.

3. JCAH requirements (pre-anesthesia lab work and history).

4. Anesthetist's responsibility.

E. Pathology report.

1. Content.

2. JCAH requirements (gross description)

3. MRL's responsibility.

4. Pathologist's responsibility.

F. Clinical laboratory report.

1. Contents.

2. JCAH requirements.

3. Technician's responsibility.

4. Signatures.

5. Original reports.

G. X-ray reports.

1. Contents.

2. JCAH requirements.

3. MRL's responsibility.

4. Radiologist/Roentgenologist.

H. Consultations.

1. Definition.

2. Signatures.

3. MRL's responsibility.

4. Required consultations (JCAH).

I. Progress Notes.

1. Admission notes.

2. Frequency.

3. Signatures--JCAH.

J. Doctors' Orders.

1. Signatures.

2. Stop orders on dangerous drugs.

3. Narcotics.

4. Counter-signatures.

K. Nurses' Notes.

L. Autopsy findings.

IV. General Review--Cover for Materials.

RECORD CONTENT

QUANTITATIVE ANALYSIS OF THE MEDICAL RECORD--PART TWO
STUDENT OUTLINE

I. Special Records.

A. Obstetrical Record.

1. Prenatal record.

2. Content of history and physical.

3. Labor and delivery.

4. Postpartum record--nurses' notes.

5. Birth certificates.

B. Newborn.

1. Physical examination.

2. Maternal history.

3. Nurses' notes.

II. Specific Record Forms.

A. Nurses' notes.

B. Graphic record.

C. Electrocardiogram.

1. Interpretation.

D. Accident report.

1. Content.

2. Accidents to inpatients.

3. Outpatients admitted due to accident elsewhere.

E. Diabetic curve--graph.

F. Electroencephalogram.

G. Basal metabolism record.

H. Authorizations.

1. Operative.

2. Autopsy.

3. Special treatment.

4. Release of medical information.

5. Release against medical advice.

6. Mortician's receipt for body.

I. Certificates.

1. Birth.

a. MRL's responsibility.

2. Death.

a. MRL's responsibility.

J. Recovery Room Record.

K. Short Stay Record.

L. Clothes List.

M. Deficiency Record.

N. Correspondence.

O. Transfusion Record.

CONTENT OF MEDICAL RECORDS

I. Topic: General Review.

II. Objective: To review principal points of medical records.

III. Activities: Lecture and discussion.

A. Standards.

B. Medical Record Forms.

C. Record Content.

IV. Assignments: Review Exercises.

V. Materials and References:

A. Transparencies.

1. "Dear Doctor #1"

2. "Dear Doctor #2"

3. "Dear Doctor #3"

4. "Dear Doctor #4"

B. Set of slides.

C. Guide for Preparation of Medical Record Forms.

D. Sample Forms.

E. Review Exams.

Medical Record Standards

Please refer to your Hospital Accreditation References of JCAH and find solutions for the following:

A. The Head Nurse in a small hospital in southern Colorado has been writing the histories for the patients.

STANDARD: P. 104 A-4.

B. Several of the physicians on the medical staff use manifestations for final diagnoses (i.e., acidosis, angina, vomiting, retention of urine).

STANDARD: p. 105 A-12.

C. The pathologist insists on keeping the original report in his files.

STANDARD: p. 104 A-6.

D. The four physicians on the medical staff have built a clinic near the hospital. They take the medical records of their patients to the clinic to complete them.

STANDARD: p. 117, paragraph 3.

Hospital Standards

1. X-ray reports are signed with a rubber stamp signature. The head X-ray technician stamps the reports before placing the original typed report on the record.

STANDARD: p. 111, paragraph 5.

2. The Joint Commission advises that after discharge of a patient, his record should be complete within how many days?

STANDARD: p. 107 g-2.

PROBLEMS

You are engaged to take charge of the Medical Record Department in a 150 bed hospital where the following conditions exist:

a. Medical Records are filed by diagnosis.

b. Medical Records are filed on open shelves.

c. A system called "Lambert" classification is still being used.

d. No definite terminology for operations is being used.

e. Histories and physical examinations are incomplete.

f. Anyone in the hospital is permitted to borrow medical records.

g. The medical record forms used are different from those you have been accustomed to.

To what extent would you reorganize the department with reference to the above conditions? What changes would you suggest and what steps would you take to bring about these changes?

PROBLEMS

1. If you have tried every means within your power to get the doctor to complete his records, and the hospital authorities or the medical staff take no action, what would you do?

2. You are engaged to work in a 150-bed hospital. You are asked to install a record system where there has been none, and the medical records have been poorly written. How would you go about it? What would be your first steps?

3. The basic requirements for an efficient medical record department are:

4. Give the required autopsy percentage for an approved hospital.

General Review

The physicians on the medical staff are responsible for the QUALITY of medical care in the hospital. This is accomplished through their review of the medical records in their medical staff committee activity. The medical record librarian assists the physician in his qualitative review.

The history and physical examination should be recorded within 24-48 hours of the patient's admission to the hospital. If the patient goes to surgery, the history and physical reports should be on the record prior to the surgery. This should include a record of the condition of the patient's heart and lungs.

If the patient is readmitted within 30 days for the same illness, the previous history and physical with an interval note will suffice.

Each clinical entry should be signed by the attending physician. This includes the face sheet (usually comprising provisional diagnosis, final diagnosis, operation, and condition on discharge), as well as history and physical examination, operative report, progress notes, discharge summary, and orders for treatment.

The specialized reports such as pathology, radiology, anesthesiology, etc., are the responsibility of those specialists alone.

If the attending physician signs only the face sheet, he takes the responsibility for the reports and entries of the nurses, technicians, admitting personnel, etc.

Initials are valid if they can be identified as belonging to the physician involved.

If the physician wishes to use a rubber stamp he may. However, he should place in the hands of the administrator a signed statement to the effect that he is the only person who will have possession of the stamp and is the only one who will use it. The use of the rubber stamp by a nurse or secretary is not acceptable.

A short form is acceptable in certain treatment and diagnostic cases of a minor nature, which require less than 48 hours' hospitalization. Short forms may be appropriate for such conditions as tonsillectomies, cystoscopies, lacerations, plaster casts, removal of superficial growths, and accident cases held for observation. The short form should at least include identification data, a description of the patient's condition, pertinent physical findings, an account of the treatment given, and any other data necessary to justify the diagnosis and treatment. The record should be signed by the physician.

The routine laboratory work required of all admissions should be a urinalysis, a hemoglobin and/or hematocrit.

All patients admitted to the hospital shall have discharge summaries with the exception of normal newborns, normal obstetrical cases, and those cases in the hospital 48 hours or less for minor conditions.

In conducting a general quantitative review of the medical record, the medical record librarian should watch for errors, discrepancies, or omissions.

This quantitative analysis should be done promptly upon dismissal while the patient and his hospital stay are still in the minds of those responsible for his care.

Be careful to identify all records with the patient's full name and his hospital number. It is a good habit to check the typed name with the patient's actual signature. All reports should have the complete date, this includes the year.

All reports should be original and signed by party responsible. If the Medical Record Committee approves the use of thermofax or copies, the report should bear the original signature of the physician along with a statement that this is a true copy of the original. A rubber stamp can be made up to provide this statement. Remember that this is a permanent record. Pencil should not be used in the medical record as this is not a permanent media.

Review the sociological data. Sometimes there are discrepancies throughout the medical record regarding sex, age, marital status, etc.

(Refer to JCAH Bulletin #10, December, 1955)

Medical Record Clerks Training Program

BETTER FORMS FOR BETTER PATIENT CARE

A check list for form control
Please answer yes or no if applicable

Department_____

Form No._____Title_____

____ 1. Is this form necessary?
____ 2. Do you know of any other forms in use that have approximately the same information?
____ 3. Could this form be eliminated by combining it with another one?
____ 4. If this form is prepared with more than one copy, should it be a snap-out?
____ 5. Are all copies necessary?
____ 6. Do copies of this form go to other departments?
____ 7. Do other departments use this form as is, or do they transcribe the information to another form?
____ 8. Are all departments who need the information on this form getting a copy?
____ 9. Is there any information on this form not being used?
____10. Is the source information from which this form is prepared in the same sequence as this form?
____11. Is the information on this form in sequence?
____12. Is sufficient space provided?
____13. Is too much space provided?
____14. Are there any ambiguous, strange words, or abbreviations on this form?
____15. Are abbreviations or special terms consistent?
____16. Could check block be utilized?
____17. Is all possible data preprinted?
____18. If this form is written on a typewriter, is there much time lost skipping through headings to get to the blank space to enter the information?
____19. Does the spacing fit the machine?
____20. If so, do you think it should be redesigned to utilize tabulator stops?
____21. Do you plan to use the form as a permanent record?
____22. If so, does the size of this form fit the file?
____23. Approximately how many copies of this form do you use in a year?

NOTE: This form is sponsored by the Texas Hospital Association Council on Administrative Practice to encourage hospitals to establish a Forms Committee and concentrate on standard, well-prepared forms to avoid waste, expense, and inefficiency.

DAILY REVIEW EXAM

Analysis of the Medical Record

1. The medical record of a discharge could take anywhere from a half hour to an hour to answer most requests. One of the following should be used to establish quick and efficient location of a medical record that has been requested.

   a. Institute a control system to provide information about the location of all incomplete records.
   b. Offer a prize to the employee who first locates each record.
   c. Assign a clerk to devote his time to searching for such records.
   d. Ask each person who wants to review or use a record to look for it himself.

2. It is considered good practice to have the medical records of discharged patients:

   a. kept at the nurses' station until the doctors complete them.
   b. collected from the nurses' station once a week.
   c. picked up from the nurses' station by the attending physicians.
   d. reach the medical record department by the morning of the day following discharge.

3. For a hospital to meet the standards of the Joint Commission on Accreditation of Hospitals, each medical record must contain:

   a. daily progress notes written by a doctor.
   b. the notarized signature of the attending physician.
   c. a typewritten discharge summary dictated by the attending physician.
   d. a history written or dictated by a doctor.

4. The quality of care reflected in a hospital's medical records is evaluated by the:

   a. physicians on the medical staff.
   b. medical record librarian.
   c. hospital administrator.
   d. hospital attorney.

DAILY REVIEW EXAM

1. Circle T for true statements and F for false statements:

A. All patients admitted to the hospital shall have discharge summaries with the exception of normal newborns, cases of a minor nature that have been in the hospital for less than 48 hours. T F

B. The statement of the chief complaint should be recorded in the words of the patient. T F

C. A complete history and physical work-up should be done on every patient regardless of the service under which he is admitted or if admitted by a physician who specializes in one field. T F

D. The medical record of a patient who has been admitted to the hospital and expires within 48 hours requires a discharge or final summary. T F

E. If a patient is admitted to a hospital bed following treatment in the Emergency Room, the original report of examination and treatment in the Emergency Room should be placed in his in-patient's medical record. T F

F. The deficiency record should be made a permanent part of the patient's medical record. T F

G. The final diagnosis is a statement of opinion made by the attending physician after he has conducted a thorough study of the patient. T F

H. The "initial impression" is formulated before the attending physician has performed the physical examination of the patient. T F

I. Reports of operative procedures should be dictated or written immediately after the surgery and should contain both a description of the findings and a detailed account of the technique used and the tissues removed. T F

J. Duplicates of the X-ray and laboratory reports should not be entered in the patient's record. T F

K. A postanesthetic note should be recorded by the surgeon following the surgery. T F

L. A newborn record need not include the physician's orders. T F

MEDICAL RECORD CONTENT (circle the correct answers)

2. According to the standards of the Joint Commission on Accreditation of Hospitals, what routine laboratory work must be done on all admissions to the hospital?

   A urinalysis, hemoglobin and/or hematocrit should be done on all admissions.

3. Patient X has been admitted to the hospital twice this month because of a duodenal ulcer condition. Yesterday, he was admitted from the emergency room with a broken leg due to a car accident. The physician enters an interval note on the chart since this is the patient's third admission this month. Is this sufficient? If answer is no, explain below.

   A physician may write an interval note only if the patient is readmitted within a month for the same illness. If for a different illness, a complete history and physical should be obtained.

4. In what situation may a hospital medical record contain notes written months before the patient is admitted to the hospital?

   Obstetrical patient.

5. There are situations in which a short form is acceptable on the medical record. From the situations listed below, select the two that would qualify.

   A. A patient who expires shortly after admission to his hospital room and who had been unresponsive.

   B. A patient admitted for the purpose of having X-rays and cystoscopy.

   C. A T & A (tonsillectomy and adenoidectomy case) that required transfusions because of postoperative bleeding.

   D. An emergency room patient admitted for observation overnight.

   E. A patient with a subsiding pneumonia who has a sebaceous cyst removed three days after admission.

6. Circle those cases that are required to have a consultation by the Joint Commission on Accreditation of Hospitals.

   A. Patients with obscure diagnoses.
   B. Interruption of suspected pregnancies.
   C. First Cesarean Sections.
   D. Poor Surgical Risks.
   E. All of the above.
   F. None of the above.

DAILY REVIEW EXAM

ANALYSIS OF THE MEDICAL RECORD

Circle the letter identifying the correct answer to the questions.

1. Which of the following would be the most diplomatic answers or explanations to a patient who objects to answering questions in the admitting office about his father's name and his mother's maiden name?

   a. Many patients have similar names and this will help assure us that we are not confusing your confidential record with anyone else's record.
   b. This is a hospital regulation and all patients are asked this information.
   c. Should you die this information is necessary for the death certificate.
   d. No hospital record is complete without that information.

2. What is the legal name of this patient?

   a. Mrs. Ronal Bush.
   b. Mrs. Ronald (Alyce) Brown.
   c. Alyce Brown.
   d. Mrs. Alyce (Ronald) Brown.

3. The examining doctor will note clubbing (if present) when he examines the:

   a. genitalia.
   b. extremities.
   c. ears.
   d. chest.

4. Which one of the following statements would be found on a physical examination report?

   a. "Short seizures" of one-year duration.
   b. Fundi: No edema, hemorrhage, or papilledema.
   c. Patient admitted for neurological workup.
   d. After abdominal cavity was entered, exploration was done.

5. Which of the statements in number 4 might be found in the operative report?

   _____

6. Indicate which of the following is not a part of the obstetrical record.

   a. Prenatal record.
   b. Labor record.
   c. Newborn Physical Examination Record.
   d. Postpartum record.

7. A maternal or obstetrical morbidity would be considered when there occurs:

   a. Temperature of 100.6° on 2nd postpartum day, 100° on 3rd day, and 102° on 4th day.
   b. Postpartum hemorrhage necessitating the transfusion of 100 cc. of blood.
   c. Blood pressure ranging from 210/110 to 180/90 for 6 days postpartum.
   d. Temperature rising to 102° three hours after delivery; normal thereafter.

8. In a small hospital where there is no pathologist, the tissue being removed at operation is sent to a pathologist in a nearby town; which of the following methods of reporting his findings is preferred?

   a. He sends a signed original copy of his report to the hospital.
   b. He gives a report by telephone to the medical record librarian and to the surgeon.
   c. He writes a letter to the surgeon in which he reports his findings.
   d. He keeps a complete report in his own files and sends carbon copies to the hospital.

STUDY QUESTIONS

CONTENT AND ANALYSIS OF THE MEDICAL RECORD

Reference: Chapter II, Manual for Medical Record Librarians, pp. 69-73.

1. What are the chief uses, purposes, and value of nurses' notes while a patient is still in the hospital?

   Ans. As a record of the patient's condition during the physician's absence.
   As a time saver for the physician and an eliminator of errors.
   As proof of work done.
   To complete the medical record.

2. What are the chief uses, purposes, and value of nurses' notes in the weeks, months, and years after the patient has been discharged from the hospital?

   Ans. Nurses' notes show the doctor's visits and the care for his patients.
   They also are used for medical audit and for medico-legal purposes.
   They will also show whether treatments were given or not and how the patient responded to them; the patient's progress, and picture of the patient's care should the case go to court.

DAILY REVIEW EXAM

ANALYSIS OF THE MEDICAL RECORD

Circle the letter identifying the correct answer to the questions.

1. Since many records come to the medical record department without any name, room number, or hospital number on some of the sheets, or with only incomplete headings, which of the following do you feel is the wisest action to take?

   a. Call the matter to the attention of the director of nursing service.
   b. Find out what nurse or ward secretary is responsible for each omission and return the records to her to be filled in.
   c. Have someone in the medical record department fill in each missing or incomplete heading.
   d. Fasten the sheets securely with the rest of the record and leave them as received.

2. While charting on the evening of 11/30/67, a nurse inadvertently reversed the notes on medication administered to two patients, writing them in the wrong records. This was discovered the next day. The nurse who made the error should:

   a. Copy both sheets, making the indicated corrections and destroy the originals.
   b. Draw heavy lines through the incorrect notes, blacking them out completely and write the correct information above with her signature and the date 12/1/67.
   c. Use ink eradicator carefully to erase the incorrect notes, writing the correct information in the space left.
   d. Draw a line through the incorrect notes, writing above them the correct notes, her signature, and the date of 12/1/67.

DISCHARGE ANALYSIS

CONTENT OF MEDICAL RECORDS AND QUANTITATIVE ANALYSIS

I. Topic: Daily Analysis of Hospital Service.

II. Objectives:

1. To analyze the various methods of compilation--their advantages and disadvantages.
2. To understand the content and uses of the Daily Analysis.
3. To become familiar with the requirements of the various accrediting agencies.

III. Activities--Lecture.

1. Definition of terms.
2. General considerations.
3. Uses.
4. Methods of Compilation.
5. Content.

IV. Materials: Discharge Sheets and Disease Service Classification Exercise.

V. Assignment: Complete Disease Service Classification Exercise.

DAILY ANALYSIS OF HOSPITAL SERVICE--OUTLINE FOR STUDENTS

Objectives: To analyze the various methods of compilation--their advantages and disadvantages.

To understand the content and uses of the Daily Analysis.

To become familiar with the requirements of the various accrediting agencies.

I. Definition of terms.

A. Daily analysis.

B. Service.

C. Consultation.

D. Postoperative death.

E. Infection.

II. General considerations.

A. Principle of service assignment.

B. Place in work flow.

C. Accuracy.

D. Validity.

E. Reliability.

III. Uses.

A. To governing board and administrator.

1. Administrative planning and control.

2. Comparative report.

B. Outside agencies.

1. Governmental.

2. Professional.

3. Educational.

4. Insurance.

C. To the medical record librarian.

D. To the medical staff.

1. Departmental and staff meetings.

2. Research.

IV. Methods of Compilation.

A. Punch cards.

B. Group analysis.

C. Individual analysis.

D. I.B.M.

E. Professional activities service.

V. Content.

A. Social data.

B. Minimum service maintained.

1. Medicine.

2. Surgery.

3. Obstetrics.

4. Newborn.

C. Results.

1. Deaths.

2. Autopsies.

3. Other.

D. Morbidity.

1. Obstetrical.

2. Other hospital infections.

3. Complications.

E. Consultations.

1. JCAH requirements.

2. AMA requirements.

CONTENT OF MEDICAL RECORDS AND QUANTITATIVE ANALYSIS

I. Topic: Daily Analysis of Hospital Service.

II. Objectives:

A. To learn the individual and group methods of compilation--their advantages and disadvantages.

B. To understand the content and uses of Daily Analysis.

III. Activities: Lecture and Laboratory Session.

A. General review of first lesson.

B. Practice session using individual and group compilation.

IV. Materials:

A. Transparencies.

1. "Outline of Content of Discharge Analysis."

2. "Flow of Charts."

B. References.

1. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physician's Record Co., Berwyn, 1963.

C. List of Definitions.

D. Exercise Forms.

SERVICE ASSIGNMENT FOR QUANTITATIVE ANALYSIS

COMMUNICABLE DISEASE: to include all transmissible disease in the customary acceptance of the term.

DERMATOLOGY: to include all diseases and conditions of the skin.

FRACTURES: to include all cases of fracture without regard to the age of the patient.

GYNECOLOGY: to include all diseases and conditions of the female generative organs and the urinary organs, and the rectum if a part of the disease syndrome of the generative organs. Disease of the breast and diseases and conditions associated with pregnancy and the puerperium are not included.

CANCER: (Malignant disease): to include all malignancies of all sites, including lymphatic and hematopoietic tissues.

MEDICINE: to include all diseases and conditions treated by the administration of internal remedies except those which are assigned to a subspecialty.

NEWBORN: (Alive at birth): to include only infants born in the hospital. Infants born at home or on the way to the hospital should be entered under medicine. An infant is considered a newborn until he is 28 days old.

OBSTETRICS: to include all diseases and conditions of pregnancy, labor, and the puerperium, whether normal or pathological, pregnancy commencing with conception and the puerperium ending, insofar as it concerns the patient admitted for delivery, with discharge from the hospital.

DELIVERED: (20 weeks or over): to include mothers for whom pregnancy has terminated in the hospital, regardless of whether the infant is a live birth or a fetal death (stillbirth).

ABORTED: (under 20 weeks): to include mothers from whom the pregnancy has terminated under the time specified by your health agency for a viable infant. If the fetus was aborted before admission to the hospital, no count is kept of the fetus, but if aborted after admission of the mother to the hospital, a count should be kept in the column provided for that purpose.

NOT DELIVERED: to include pregnant women for a condition of pregnancy but not delivered of a live born or stillborn infant in the hospital. Under this heading will come threatened abortions which have been prevented from terminating, false labors, deliveries outside the hospital brought in for the puerperium, retained placentas, postpartum hemorrhages, lactating breasts, and other puerperal conditions.

OPHTHALMOLOGY: to include all diseases, injuries, and conditions of the eye and supporting structures regardless of types of therapy, except tumors, venereal diseases, and some communicable diseases.

ORTHOPEDICS: to include all diseases and conditions of the bones, joints, muscles, fascia, tendons, and their nerve control which affect motion and are not acutely traumatic in nature.

OTORHINOLARYNGOLOGY: (also called otolaryngology): to include all diseases of the ear, nose, throat, larynx, pharynx, naso-pharynx, and tracheobronchial tree.

PEDIATRICS: (children): assign this service according to disease or condition; check "child" in the proper bracket on the statistical review sheet.

SURGERY: to include all diseases and conditions treated by manual or mechanical means except those which are assigned to a subspecialty. Breast surgery is counted under surgery.

UROLOGY: to include all diseases and conditions of the male genito-urinary organs and the female urinary organs, unless the latter are a part of the disease syndrome of the female generative organs. (See under Gynecology).

TRAUMATIC SURGERY: to include all cases dealing with a pathological condition brought about by sudden or acute injury. Includes sprain, contusions, lacerations, etc.

DEFINITION OF TERMS--DAILY ANALYSIS OF HOSPITAL SERVICE

1. Daily Analysis--Gross appraisal of the efficiency of the hospital and medical staff primarily for the benefit of, and use by, the hospital itself.

2. Service--Grouping of records of discharged patients according to their diagnosis. The number of groups varies with the size of the hospital. It is recommended that a hospital of 100 beds or less have at least the following services: Medical, Surgical, Pediatric, Obstetric, and Newborn.

3. Consultation--Written opinion of another physician on a case, requested by the attending physician.

4. Postoperative Death--One which is attributable to, or precipitated by an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence period, which is usually regarded as being within the first ten days postoperative.

5. Census--Number of inpatients occupying hospital beds at any given time. The count is usually taken at midnight when there are fewer admissions and discharges. Any specified time is permissible, just so it is the same hour each day.

6. Census Days--Numerical accumulation of the days of care rendered to all inpatients by clinical service during the reporting period. A patient day (census day) is the unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour of two successive days.

7. Physicians' Index--This index is a record of the work done and the end results obtained by the physicians practicing in the hospital.

Name_____

DISEASE SERVICE CLASSIFICATION

Medicine Pediatric OB Not Delivered Newborn
Surgery OB Delivered OB Aborted

Classify the following according to service, using the seven services listed.

1. Abortion, spontaneous _____
2. Acute appendicitis with appendectomy _____
3. Acute colitis _____
4. Acute cystitis _____
5. Upper respiratory tract infection _____
6. Adenocarcinoma of the breast with mastectomy _____
7. Mumps in a 13 year old _____
8. Cardiac arrest _____
9. Rheumatoid arthritis _____
10. Rheumatic fever in a 5 year old _____
11. Cleft palate and harelip in a newborn _____
12. Gastroenteritis _____
13. Burn of the skin _____
14. Fracture, right ankle, with reduction and casting _____
15. Infectious hepatitis _____
16. Prematurity _____
17. Retained placental tissue _____
18. Cholecystitis with cholecystectomy _____
19. Bronchopneumonia _____
20. Inguinal hernia with herniorrhaphy _____
21. Subacute appendicitis, not operated _____
22. False labor _____
23. Diverticulitis and diverticulosis _____
24. Adult situational reaction _____

ROLE PLAYING

ACTION SITUATION: ETHICAL PROBLEMS

OBJECTIVES: Introduction to ethical decision-making of a Medical Record Librarian

ROLES:
1. Medical Record Librarian - Miss Quick
2. Chief of Medical Staff - Dr. M. Rude
3. Medical Staff Member - Dr. I. B. Mean
4. Chairman of Medical Record Committee - Dr. R. Smart
5. Administrator - Mr. M. Fairly
6. Chairman of the Governing Board - Mr. J. Graves

PROBLEM: In reviewing medical record, Medical Record Librarian finds:

1. Patient admitted and scheduled for surgery.
2. Patient had acute appendicitis and an appendectomy.
3. Pathological report indicated normal appendix.

Rumor has it that the patient was an unmarried, pregnant girl and that the record was falsified. Further rumor has it that the patient had a surgical abortion.

WHAT TO DO?

HOSPITAL STATISTICS

HOSPITAL STATISTICS

I. Topic: Hospital Statistics.

II. Objectives: The objectives are to provide a better understanding of the importance of accurate statistical reports, to learn how to acquire the necessary information to complete the reports, and to learn how the information is to be used.

III. Activities: Lecture.

A. Medical statistical data in the hospital are primarily gathered from the medical record. Statistical reports are required by the governing board, by the hospital administrator, and by the accrediting agencies.

B. A method or procedure for collecting the data must be established. Daily cumulative tabulation of data will provide the most accurate record. Data are collected from the medical records of discharged patients and from the daily census of admissions and discharges.

C. Key words for statistical data are: what, why, how, and when.

1. What information do we need?

2. Why do we need certain information?

3. How are we going to use this information?

4. When do we get the information and when do we need it?

D. What information is desired by whom?

1. Hospital statistics--determination of basic data.

a. Requirements of the accrediting agencies.

b. Collection of data (method).

c. Uniformity of data.

2. Vital statistics.

a. Birth certificates.

b. Death certificates.

c. Fetal death certificates.

E. Analysis of hospital service.

1. Discharge analysis procedure.

2. Monthly and annual reports.

F. Computation of percentages and rates most frequently computed.

IV. Assignment: None.

V. References:

Elstad, Rudolph, "How to Make a Smaller Hospital's Annual Report a Big Success," Hospitals 22:30-34, June 1, 1948.

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International Recommendations on Definitions of Live Birth and Fetal Death, Federal Security Agency, Public Health Service National Office of Vital Statistics, Washington, D. C., Public Health Service Publication 39:6, 1950.

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HOSPITAL STATISTICS

NOTE: This supplement is intended to draw your attention to variations in the way certain items are computed by (1) JCAH; (2) Huffman; (3) AMA; (4) AHA. It is also intended to point out the averages and/or rates that are computed in the same fashion by all.

1. AVERAGE LENGTH OF STAY:

   a. Huffman, p. 390: average length of stay for inpatients.

   $$\frac{\text{Total No. of inpatient days' care rendered to discharged patients (ex. N.B.)}}{\text{Total No. of inpatients who were discharged or who died (ex. N.B.)}}$$

   b. JCAH: survey report: no formula given; newborn excluded from average length of stay.

   c. AHA: Uniform Chart: same as Huffman.

---

2. DEATHS:

   a. Gross Death Rate:

      (1) Huffman, p. 382.

      $$\frac{\text{Total No. of deaths for the period}}{\text{Total No. of discharges (and deaths) for the period}} \times 100 = \%$$

      (2) JCAH: same as Huffman.

      (3) AHA: no formula given.

   b. Net Death Rate:

      (1) Huffman, p. 382.

      $$\frac{\text{Total deaths 48 hours or over for the period}}{\text{Total deaths over 48 hours and discharges for the period}} \times 100 = \%$$

      (2) JCAH: survey report, p. 4.

      $$\frac{\text{deaths}}{\text{discharges}} \times 100 = \%$$

      (Subtract deaths under 48 hours from both numerator and denominator.)

(3) AHA: no formula given.

c. Maternal Death Rate: (or Maternal Mortality Rate):

(1) Huffman, p. 383.

$$\frac{\text{Total No. of deaths of obstetrical patients for the period}}{\text{Total No. of discharges (and deaths) of obstetrical patients for that period}} \times 100 =$$

(2) JCAH: survey report, p. 8.

$$\frac{\text{maternal deaths}}{\text{obstetrical discharges}} \times 100 = \%$$

(3) AHA: no comment.

Note: JCAH and Huffman agree, if you recall that "obstetrical" refers to delivered, not delivered, and aborted.

d. Infant Death Rate: (or Infant Mortality Rate):

(1) Huffman, p. 384.

$$\frac{\text{Total No. of deaths of infants born in the hospital for a period}}{\text{Total No. of viable newborn infants discharged (including deaths) for the period}} \times 100 = \%$$

(2) JCAH: survey report, p. 8.

$$\frac{\text{newborn deaths}}{\text{live births}} \times 100 = \%$$

(3) AHA: no comment.

e. Perinatal Mortality Rate:

(1) Huffman: no comment.

(2) JCAH: no comment.

(3) AHA: no comment.

(4) Committee on Maternal and Child Care of the Council on Medical Service, American Medical Association, pp. 7, 10-11.

The Perinatal Mortality Rate is to be calculated on the basis of total births in the perinatal period chosen for study. However, for those using Perinatal Period II, it is necessary to calculate

and report both the Perinatal Period I and Perinatal Period II rates. This is to insure that the Perinatal Period II rate of one study will not be confused and wrongly compared with the Perinatal Period I rate of another study, and in order that all studies reported in the United States may be compared on a common basis with each other, and in turn with the rates of other countries, many of which use Perinatal Period I in calculating their perinatal mortality rates. Perinatal Mortality is defined as those deaths of fetuses and newborn infants.

Perinatal Period I rate is calculated by the following formula:

$$\frac{\text{Hebdomadel deaths and Fetal deaths 1001 grams and over} \times 1000}{\text{Live births and Fetal deaths 1001 grams and over}}$$

Perinatal Period II rate is calculated by the following formula:

$$\frac{\text{Neonatal deaths and Fetal deaths 501 grams and over} \times 1000}{\text{Live births and Fetal deaths 501 grams and over}}$$

The proportion of deaths of the various component parts and subparts of the perinatal period (such as hebdomadal and posthebdomadal in the neonatal, and antepartum and intrapartum in the fetal) should be calculated on the basis of total births in question as used in calculating the particular total perinatal mortality rate that is under consideration.

These component proportions are to be compiled in addition to--and the neonatal proportion is not to be considered a substitute for--the well established neonatal death rate which traditionally and accurately has been calculated on the basis of live births only. The purpose of calculating component proportions of the total perinatal mortality rate for either Perinatal Period I or Perinatal Period II as outlined above is to provide more accurate statistical data to better delineate the problem of the perinatal period.

f. Postoperative Death Rate:

(1) Huffman, p. 383.

$$\frac{\text{Total No. of deaths within 10 days postoperative for a period} \times 100 = \%}{\text{Total No. of patients operated upon during that period}}$$

(2) JCAH: survey report, p. 7.

$$\frac{\text{number of deaths within 10 days of surgery}}{\text{number of operations}} \times 100 = \%$$

(3) AHA: no comment.

Note: JCAH and Huffman agree, although the wording of the formula differs.

g. Anesthesia Death Rate:

(1) Huffman, p. 383.

$$\frac{\text{Total No. of anesthesia deaths for the period}}{\text{Total No. of anesthetics administered for the period}} \times 100 = \%$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

---

3. AUTOPSIES:

a. Gross Autopsy Rate:

(1) Huffman, p. 388.

$$\frac{\text{Total autopsies for a given period}}{\text{Total deaths for a given period}} \times 100 = \%$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

b. Net Autopsy Rate:

(1) Huffman, p. 388.

$$\frac{\text{No. of autopsies for a period}}{\text{Total No. of deaths minus unautopsied coroner's or medical examiner's cases}} \times 100 = \%$$

Huffman notes: (p. 389): "If the coroner's cases had been autopsied at the hospital and had thus become available for teaching purposes, they would have been counted as net autopsies just as any death with autopsy that was not determined to be a coroner's case."

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

c. Autopsy Rate on Deaths Over 48 Hours:

(1) Huffman: no comment.

(2) JCAH: no comment, although this statistical item is required; suggested formula:

$$\frac{\text{No. of autopsies on deaths over 48 hours during the period}}{\text{No. of deaths over 48 hours during the period}} = \%$$

(3) AHA: no comment.

---

4. DAILY AVERAGE NUMBER OF PATIENTS (or AVERAGE DAILY CENSUS): (from the census)

a. Huffman, p. 395.

$$\frac{\text{Total No. of inpatient days' care for the period (ex. of newborn)}}{\text{Total No. of days in the period}}$$

b. JCAH: survey report: no comment.

c. AHA: Handbook, p. 19.

$$\frac{\text{No. of patient days (other than newborn) during a period}}{\text{No. of calendar days in the period}}$$

Note: Huffman and AHA agree, although formula differs.

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5. PERCENTAGE OF OCCUPANCY: (from the census)

a. Huffman, p. 396.

$$\frac{\text{actual patient-days care (exclusive of newborn) for a given period x 100}}{\text{maximum patient-days care (ex. bassinets) for the period}} = \%$$

b. JCAH: survey report, p. 3.

$$\frac{\text{average daily census x 100}}{\text{bed complement}} = \%$$

JCAH Note: "bed complement - actual number of beds available for use at present time."

c. AHA: Uniform Chart, p. 19-21.

actual patient days during the period x 100 = %
maximum patient days (as determined by bed capacity) during the period

---

6. CESAREAN SECTION RATE:

a. Huffman, pp. 389-390.

Total No. of cesarean sections performed for the period x 100 = %
Total No. of births for the period

b. JCAH: survey report, p. 8.

No. of sections x 100 = %
No. of deliveries

c. AHA: no comment.

---

7. CONSULTATION RATE:

a. Huffman, pp. 362-363.

Total No. of patients receiving consultations x 100 = %
Total No. of patients discharged, including deaths, during the period

b. JCAH: see Huffman, p. 363.

Total patients receiving consultations for the period x 100 = %
Total patients discharged (including deaths) for that period

c. AMA: see Huffman, pp. 363, 364.

Total No. of consultations given x 100 = %
Total patients discharged (including deaths) for that period

Note: JCAH wants percentage of patients receiving consultation, regardless of the number of consultations per patient; AMA wants consultations given, regardless of the number of patients receiving consultations. . .(Huffman, p. 363).

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8. INFECTION RATE: (also called MORBIDITY RATE):

a. Gross Infection Rate, or Gross Morbidity Rate:

(1) Huffman, p. 386.

$$\frac{\text{Total No. of infections for period x 100}}{\text{Total No. of patients discharged (incl. deaths) during the period}} = \%$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

b. Net Infection Rate, or Morbidity Rate:

(1) Huffman, p. 387.

$$\frac{\text{Total No. of infections debited against the hospital for a given period x 100}}{\text{Total No. of patients discharged (including deaths) for that period}} = \%$$

(2) JCAH: survey report, no comment.

(3) AHA: no comment.

c. Postoperative Infection Rate for Clean Surgical Cases:

(1) Huffman, p. 387.

$$\frac{\text{Total No. of infections in clean surgical cases for a given period}}{\text{Total No. of operations for that period}}$$

(2) JCAH: survey report, p. 7.

$$\frac{\text{No. of infections in clean cases c 100}}{\text{No. of operations}} = \%$$

(3) AHA: no comment.

---

9. NEONATAL DEATH RATE:

a. Huffman, p. 384.

$$\frac{\text{Total No. of infant deaths occurring within 28 days of birth for a given period x 100}}{\text{Total No. of viable newborn infants discharged (inc. deaths) during the period}} = \%$$

Note: Follow-up system necessary to accurately determine number of infants who die within the 28-day period after birth, but <u>after</u> discharge from the hospital.

b. JCAH: no comment.

c. AHA: no comment.

---

10. <u>FETAL DEATH RATE</u>:

a. Huffman, p. 384.

In hospital statistics, fetal deaths fall into two groups:

(1) fetal deaths of less than 20 weeks gestation (<u>abortions</u>)
(2) fetal deaths of 20 or more weeks gestation (<u>stillbirths</u>)

Rates are computed for stillbirths, usually, as follows:

$$\frac{\text{Total No. of deaths of infants (born in the hospital) for the period}}{\text{Total No. of infant discharges (including deaths) for the period}} \times 100 = \%$$

Note: <u>total births</u> = live births plus stillbirths

b. JCAH: survey report, no comment.

c. AHA: no formula.

<u>BIBLIOGRAPHY</u>:

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Huffman, Edna K., <u>Manual for Medical Record Librarians</u>, 5th Ed., 1963, Physicians' Record Co., Berwyn.

Joint Commission on Accreditation of Hospitals: Survey Report: Part II questionnaire to be completed by the hospital prior to visit of JCAH field representative, 1958.

HOSPITAL STATISTICS

AVERAGE LENGTH OF STAY is the average number of days of service rendered to each inpatient discharged during a given period. (AHA)

Reference: Uniform Hospital Definitions, AHA.

MONTH	PTS. DISCHARGED	DAYS CARE TO PTS.	AVERAGE LENGTH OF STAY
Jan.	1918	7860	_____
Feb.	1662	6968	_____
Mar.	1758	6491	_____

THE AVERAGE DAILY CENSUS is the average number of inpatients maintained in the hospital each day for a given period of time. (AHA)

MONTH	PT. DAYS AD.&CH.	PT. DAYS NEWBORN	TOT. PT. DAYS AD.,CH.&NB.	AV. DAILY CENSUS ALL PTS.	AV. DAILY CENSUS AD.&CH.	AV. DAILY CENSUS NEWBORN
Jan.(31)	5493	923	_____	_____	_____	_____
Feb.(28)	4452	757	_____	_____	_____	_____
Mar.(31)	5847	986	_____	_____	_____	_____

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days, as determined by bed capacity, during any given period of time. (AHA)

DIRECTIONS: Compute the percentage of occupancy for the hospital with 150 beds and 30 bassinets.

MONTH	PT. DAYS AD.&CH.	PT. DAYS NEWBORN	% OF OCCUP. AD.&CH.	% OF OCCUP. NEWBORN	% OF OCCUP. AD.,CH.&NB.
Jan.	5493	923	_____	_____	_____
Feb.	4452	757	_____	_____	_____
Mar.	5847	986	_____	_____	_____

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days as determined by bed capacity, during any given period of time. (AHA)

DIRECTIONS: Compute the percentage of occupancy for each of the following hospitals (X, Y, Z).

HOSP.	BEDS	PT. DAYS OF SERVICE AD. & CH.	BASSINETS	PT. DAYS OF SERVICE NEWBORN	PERCENTAGE OF OCCUP. AD. & CH.	PERCENTAGE OF OCCUP. NEWBORN
X	256	6262	44	713	_____	_____
Y	160	3937	24	558	_____	_____
Z	340	9672	32	775	_____	_____

AUTOPSY RATE is the ratio of autopsies to deaths. (Huffman)

GROSS AUTOPSY RATE is the ratio during any given period of time of all autopsies to all deaths. (Huffman)

NET AUTOPSY RATE is the ratio of total autopsies for a given period of time to total number of deaths minus the medical examiner's cases for that period which were not autopsied at the hospital. (Huffman)

MONTH	DEATHS	MEDICAL EXAMINER'S CASES	AUTOPSIES ALL CASES	MED. EXAM. CASES, AUTOP. AT HOSPITAL	GROSS AUTOPSY RATE	NET AUTOPSY RATE
Jan.	16	0	9	0	_____	_____
Feb.	10	2	5	1	_____	_____
Mar.	21	3	12	2	_____	_____

GROSS DEATH RATE is the ratio of deaths in a hospital during any given period of time to the total number of discharges and deaths during that time. (Deaths are included in figures listed under "total discharges.")

MONTH	TOTAL DISCHARGES & DEATHS	DEATHS	GROSS DEATH RATE
Jan.	892	16	_____
Feb.	748	10	_____
Mar.	985	21	_____

NET DEATH RATE (or INSTITUTIONAL DEATH RATE) is the ratio of the total number of deaths occurring in the hospital 48 hours or over after admission to the total number of discharges and deaths during that time. When computing the net death rate, the number of deaths occurring under 48 hours is subtracted from the total number of discharges and deaths. (Note: Deaths are included in figures listed under "total discharges.")

MONTH	TOT. DISCHARGES & DEATHS	DEATHS UNDER 48 HOURS	DEATHS OVER 48 HOURS	NET DEATH RATE
Jan.	892	2	14	_____
Feb.	748	2	8	_____
Mar.	985	9	12	_____

MATERNAL DEATH RATE (JCAH) is the ratio of maternal deaths during any given period of time to the total number of obstetric patients discharged during that time.

If the total number of obstetric patients discharged during the year included 2,288 mothers delivered, 137 mothers aborted, and 373 mothers who were discharged undelivered, and one of these obstetric patients died during the year, what is the maternal death rate for the year?

_____

INFANT DEATH RATE (or INFANT MORTALITY RATE) (JCAH) is the ratio of deaths of infants born in the hospital during a given period of time to live births (including deaths) during that time.

MONTH	LIVE BIRTHS	DEATHS	INFANT DEATH RATE
Jan.	154	1	_____
Feb.	127	2	_____
Mar.	188	4	_____

CESAREAN SECTION RATE (JCAH) is the ratio of Cesarean Sections performed in a given period to the total number of deliveries in that period.

MONTH	TOTAL DELIVERIES	CESAREAN SECTIONS	C/S RATE
Jan.	159	3	_____
Feb.	117	1	_____
Mar.	175	2	_____

POSTOPERATIVE DEATH RATE is the rate of deaths attributable to, or precipitated by, an operation, such as deaths from hemorrhage, shock, embolism, infection, postoperative pneumonia, etc., and occurring within the convalescence, which is usually regarded as being within the first ten days postoperative.

MONTH	OPERATIONS (PATIENTS OPERATED)	POSTOPERATIVE DEATHS	POSTOPERATIVE DEATH RATE
Jan.	392	5	_____
Feb.	255	2	_____
Mar.	355	5	_____

ANESTHESIA DEATH RATE is the ratio of anesthetic deaths (those occurring on the operating table and caused by anesthetic agents, no surgical complication) during any given period of time to the total number of anesthetics administered during that time.

(NOTE: "ANESTHETIC ADMINISTERED" MEANS "PATIENTS RECEIVING ANESTHETICS")

YEAR	ANESTHETICS ADMINISTERED	DEATHS	ANESTHETIC DEATH RATE
1965	3,796	1	_____
1966	5,740	1	_____
1967	6,480	1	_____

FETAL DEATH (STILLBIRTH) RATE is the ratio of the total fetal deaths (stillbirths) to the total number of births, during the period.

MONTH	TOTAL BIRTHS	STILLBIRTHS (FETAL DEATHS)	STILLBIRTH RATE FETAL DEATH RATE
Jan.	149	1	_____
Feb.	130	3	_____
Mar.	184	2	_____

Sample illustrating computation of daily cnesus and patient days of service rendered each day.

ADULT AND CHILDREN CENSUS
SUNSHINE HOSPITAL

	July 3	July 4	July 5	July 6	July 7
Pt. Rem. at Midnight Beginning of Day	295	298	304	329	326
Admissions for the Day (Midnight to Midnight)	25	30	47	35	30
	320	328	351	364	356
Discharges (and Deaths) for the Day	-16	-27	-16	-24	-28
Pt. Rem. at Midnight End of Day (census)	304	301	335	340	328
No. of Pt. Adm. and Dis. during the Day	1	2	3	4	2
TOTAL PT. DAYS OF SERVICE RENDERED PER DAY	305	303	338	344	330

Total Pt. Days of Service Rendered for 5-Day Period: 1044
Hospital Bed Capacity 225

What is the average daily census for the five-day period?_____

What formula did you use to obtain this average?_____

What is the percentage of occupancy for the five-day period?_____

What formula did you use to obtain this percentage?_____

COMPUTATION OF PERCENTAGES

Statistics are facts represented by figures. It is the collection, presentation, analysis, and interpretation of numerical data. You have learned how to compile statistics from the discharge analysis, now we will compute these figures.

Percentages

Per centum is a Latin phrase meaning "by the hundred." Thus a percentage is a fraction whose denominator is 100. It may be written as a decimal fraction .54 or with the percent sign 54%.

Remember, in the first week of Statistics it was pointed out that any decimal fraction may be converted to a percentage by the following rule: Move the decimal point two places to the right and add the percent sign; any percentage may be written as a decimal by moving the decimal point two places to the left and dropping the percent sign.

Any common fraction may be written as a percentage by dividing the numerator by the denominator, multiplying the quotient by 100 (moving the decimal point two places to the right) and adding the percent sign).

Example: Write as a decimal and as a percentage 33/35.

$$35/\overline{33.000}\quad .941 \quad = .94 = 94\%$$

Remember the rate in this manner: A rate is the number of times a thing happens compared to the number of times it could have happened.

Then if you want to state this ratio as a percentage, you will divide the number of times something did happen by the number of times this same thing could have happened and multiply by 100.

Take, for instance, in a hospital where 300 operations were performed, 300 wound infections could have occurred. Since 15 would infections did occur, you divide 15 by 300 to get the infection rate (5%).

$$300/\overline{15.00}\quad 0.05 \quad \text{or } 5\%$$

Now, before we work some problems let's go over a few definitions.

Patient Definitions

A HOSPITAL PATIENT is a person receiving physician, dentist, or allied services in a hospital. Hospital patients are divided into two major types:

A HOSPITAL INPATIENT is a patient who is given lodging in a hospital while receiving physician, dentist, or allied services in the hospital.

A HOSPITAL OUTPATIENT is a patient who is not lodged in a hospital while receiving physician, dentist, or allied services in the hospital.

Bed Facilities

A HOSPITAL BED is one regularly maintained in a hospital for the use of patients.

AN OUTPATIENT BED is one regularly maintained for use by outpatients in a patient center.

AN INPATIENT BED is one regularly maintained for use by inpatients who are receiving continual physician or dentist services and are lodged in continuous nursing service areas of the hospital.

ADULT BEDS are those assigned for regular use by inpatients who are 14 years of age or over, and which are maintained in areas allotted for adult or adolescent lodging, even though in some instances utilized by children.

CHILD BEDS are those assigned for regular use by patients other than newborn who have not reached the age of 14 years, and which are maintained in areas allotted for children's lodging.

NEWBORN BEDS are those assigned for regular use by infants newly born in the hospital and which are maintained in areas allotted for newborn infant lodging.

THE HOSPITAL INPATIENT BED CAPACITY is the number of beds regularly maintained for inpatients in a hospital.

ADULT BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of adult inpatients (even though in some instances utilized by children), during periods of normal operations.

CHILD BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of children and infants other than newborn, during periods of normal operations. This classification would be maintained only by those hospitals providing separate pediatric facilities.

NEWBORN BED CAPACITY is the number of inpatient beds regularly maintained, in areas intended for the lodging and full-time care of newborn infants, during periods of normal operations.

Inpatient Admission Classifications

AN INPATIENT ADMISSION is the formal acceptance by a hospital of a patient who is to receive physician, dentist, or allied services while lodged in the hospital.

An inpatient admission always involves the occupancy of a hospital bed, bassinet, or crib, by the patient, and the maintenance of a hospital chart for the patient. Only one hospital admission may be counted for an inpatient during the period of his continuing as an inpatient of the hospital. An inpatient transferred after admission from one service to another, e.g., from medical to surgical service, is to be counted as a transfer, not as a second admission. Similarly, an inpatient admitted under one financial classification and subsequently transferred to another is to be counted as a transfer. If a discharged inpatient appears for further physician, dentist, or allied services at a future time, this is counted as another admission.

When a person dies in the emergency room, prior to the granting of lodging by the hospital, such patient should be recorded as an outpatient.

Classification by Age

ADULT INPATIENT ADMISSIONS: those accepted for lodging in an adult bed facility.

CHILD INPATIENT ADMISSIONS: those accepted for lodging in a child bed facility.

NEWBORN INPATIENT ADMISSIONS: those newly born in the hospital and accepted for lodging in a newborn bed facility.

Discharges and Deaths

AN INPATIENT DISCHARGE is the termination of the granting of lodging and the formal release of an inpatient by the hospital.

Since deaths are a termination of the granting of lodging, they are also inpatient discharges, although recorded as a specific kind of discharge.

Detailed records should be maintained of inpatients' deaths occurring within or beyond 48 hours after admission.

Fetal deaths (stillbirths) should be separately stated.

Deaths occurring before admission as an inpatient, e.g., in the emergency room, are not classified as inpatient deaths. However, for the protection of the hospital and for completeness of data, a separate record of such must be kept.

A PATIENT DAY is the unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census-taking hour on two successive days.

THE HOSPITAL INPATIENT CENSUS is the number of inpatients occupying beds in the hospital at a given time.

THE AVERAGE DAILY CENSUS is the average number of inpatients maintained in the hospital each day for a given period of time.

THE PERCENTAGE OF OCCUPANCY is the ratio of actual patient days to the maximum patient days, as determined by bed capacity, during any given period of time.

AVERAGE LENGTH OF STAY is the average number of days of service rendered to each inpatient discharged during a given period.

The total number of adults, children, and newborn infants should always be stated separately in any statistical count of inpatients which determines service and facilities provided.

Infants transferred from the newborn infant nursery to a pediatric nursery should be recorded as regular child inpatients from the time of such transfer.

Infants born outside the hospital should be recorded as child inpatients and not as newborn inpatients upon admission.

Newborn infants remaining in the newborn infant nursery after discharge of the mother should continue to be recorded as newborn patients.

LEGAL ASPECTS OF MEDICAL RECORDS

LEGAL ASPECTS OF MEDICAL RECORDS

I. Legal Aspects of Medical Records.

II. Objectives:

A. To teach the students that the medical record has both medical and legal aspects and they should be familiar with the principles and administration of law applicable to them.

B. It is hoped the students will understand the following on the legal aspects of a medical record: Property Right, Confidential Communications, Types of Cases Using Evidence from Medical Records, The Medical Record in Court, Acceptance of a Subpoena, Conduct as a Witness, Legal Acceptance of Microfilmed Records, Release of Information and Authorization for Certain Procedures.

C. The students must learn the policies regarding the release of medical information, whether it be in answer to a subpoena, in response to requests from governmental agencies, from the individual patients, from relatives of patients, or others.

III. Activities or Procedures:

Lecture, explanation, and discussion will be the procedure used. The students will be given questions on medico-legal aspects of the medical record for participation purposes and as a class project.

IV. Materials, Resources, and Bibliography:

A. No special equipment will be needed.

B. If a clearance is obtained, it is possible that an attorney will speak for a short period.

C. References will be:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Hayt, Emanuel, and Hayt, Jonathan, Legal Aspects of Medical Records, Physicians' Record Co., Berwyn, 1964.

V. Assignment:

No assignment will be given as only one hour is devoted to this lesson.

VI. Summary and Evaluation:

A. Summarization will be made by pointing out the value and significance of knowing the legal aspects of medical records as practically applied in our daily professional activity.

B. Due to the brevity of this lesson, evaluation and whether or not the objectives have been obtained will rely heavily upon testing and follow-up instructor visits.

ETHICS FOR MEDICAL RECORDS PERSONNEL

ETHICS FOR MEDICAL RECORDS PERSONNEL

I. Topic: Ethics.

II. Objectives:

A. To teach the students that in the medical record profession there are standards to follow for proper conduct just as there are in any profession.

B. For the students to be able to differentiate between ethics and etiquette.

C. The students are to learn what the code of ethics are for our profession, not just the fundamental knowledge of ethics in general.

III. Activities or Procedures:

Lecture, explanation, and discussion will be the procedures used. The students will be given questions on ethics for participation purposes and as a class project.

Role playing.

IV. Materials, Resources, and Bibliography:

A. No special equipment will be needed.

B. Students will be given a copy of "The Code of Ethics."

C. Three educational cartoons on "Unethical Practices" will be used.

D. References will be:

Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., Berwyn, 1963.

Sister Mary Rose Agnes, R.R.L., "Ethical Aspects of Medical Records," Medical Record News, December, 1962.

V. Assignment:

No assignment will be given as only one hour is devoted to this lesson.

VI. Summary and Evaluation:

A. Summarization will be made by pointing out the value and significance of our Code of Ethics as practically applied in our daily professional activity.

B. Due to the brevity of this lesson, evaluation and whether or not the objectives have been obtained will rely heavily upon testing and the follow-up instructor visits.

MEDICARE, STATE, AND JOINT COMMISSION STANDARDS

MEDICARE, STATE, AND JOINT COMMISSION STANDARDS

I. Topic: Medicare Certification, Colorado State Licensure, and Joint Commission on Hospital Accreditation STANDARDS FOR HOSPITALS.

II. Objectives: 1. To introduce to the student some basic concepts about the various licensure, accreditation and certification organizations involved in surveys of hospitals and other health establishments.

2. To acquaint the student with pertinent standards and requirements of each of the inspecting bodies and agencies with general and specific application to medical records in hospitals.

3. To develop with the student a better understanding of the requirements and standards and to assist in interpretation of the standards.

4. To have the student become familiar with reference materials and publications containing standards and requirements as set forth by licensing, accrediting, and certifying bodies which apply to hospitals and hospital medical records.

III. Activities and Procedures:

This subject will be presented to the students in five parts. The presentations are:

A. Medicare Certification and State Licensure: State of Colorado: Lecture covering an overview of survey processes for licensing and certification purposes conducted by Colorado Department of Health.

B. Utilization Review and the Physician's Responsibility for Good Medical Records: Lecture on involvement of hospital medical staff as a requirement for medicare certification.

C. Medical Record Standards, Medicare Certification, and State Licensure of Hospitals: Presentation will consist of lecture, interpretation, and discussion (to include questions and answers) on pertinent standards, regulations and requirements.

D. Joint Commission Accreditation of Hospitals--Survey of Medical Records: Lecture will include minimum standards applied during survey of medical records for purposes of accreditation.

E. Interaction Panel: Lecturers on program for entire day to serve as panel members. Discussion, question and answer session held in a joint meeting of students and hospital administrators. Resource persons representing U. S. Public Health Service--Division of Medical Care Administration, Social Security--Bureau of Health Insurance, Blue Cross (as fiscal intermediary for Medicare benefits) and Colorado Department of Health will constitute supporting panel.

IV. Reference Books, Resource People, Texts:

A. Arndal, Otto, "Joint Commission on Accreditation of Hospitals," National Center for Audio Tapes, University of Colorado, Boulder.

B. Conditions of Participation for Hospitals (HIR 10, 6/67) U. S. Department of Health, Education, and Welfare, Social Security Administration, Baltimore, 1967.

C. Basic Publications of the Joint Commission on Accreditation of Hospitals (June, 1968 Revision) Joint Commission on Accreditation of Hospitals, 645 N. Michigan Ave., Chicago, 1968.

D. Hospital Accreditation References (1964 Revision) American Hospital Association, Chicago, 1965.

E. Standards for Hospitals and Health Facilities, Colorado State Department of Public Health, Hospital Services Section, Denver, May, 1965.

F. Samples of forms used in Utilization Review and Transfer of Information.

G. Resource people and participants: Medical Consultant (Dr. John Zarit) for HIB Program, Social Security Regional Office Representative, Division of Medical Care Administration Regional Office.

V. Assignments: None.

STANDARDS FOR HOSPITALS

I. Topic: Standards and Requirements for Medical Records: Medicare Certification and State Licensure of Hospitals.

II. Objectives:

A. To have the students acquire some basic knowledge about surveys of hospital medical record departments which are conducted for purposes of qualifying facility for State Licensure and Medicare Certification.

B. To have each student become familiar with documents which should become constant and ready desk-reference materials.

III. Activities and Procedures:

A. Instruction Plan.

1. Time required.

a. Two hours for medicare certification standards.

b. One hour for state licensure standards.

2. Method of Instruction.

a. Lecture.

b. Student participation.

(1). Each student to mark the standards in her own documents under the direction of the instructor.

(2). Instructor-student discourse on interpretations of standards throughout instructor's presentation.

(3). Instructor-student discussion following instructor's presentation to include questions from students relative to subject material.

B. Instructor's Outline on Lesson Content.

1. Lecture.

a. General information.

(1). Public Law 89-97.

(2). Providers of Health Insurance Benefits.

b. Surveys--state licensure and medicare certification.

(1). Team survey.

(2). Medical record consultant on team.

c. Medical record department survey.

(1). Method of survey.

(2). Consultation part of survey.

(3). Final conference with administrator.

(4). Reports made following survey.

(5). Leniency on part of surveyor on first surveys with reason--intent to assist in achieving compliance.

(a). Personal follow up.

(b). Training program--frist MRCTP PH 110-232.

d. Training programs in order to attain functional department.

(1). Need established after first surveys.

(2). Training programs for hospitals without registered medical record librarians.

(a). Qualified medical record librarian consultants or group supervisor to be retained by the individual hospitals.

(b). Introductory training course for small hospital medical record personnel.

(c). Correspondence course for medical record technicians.

e. Survey findings: medical record deficiencies.

2. Instructor-Student Participation.

a. Introduction to reference documents on standards.

(1). Medicare Certification: Conditions of Participation-Hospitals.

(2). Licensure Standards: Standards for Hospitals and Health Facilities.

b. Instructor to guide students through booklets on standards.

(1). Definitions:

(a). "Statutory requirements."

(b). "Standards."

(c). "Factors."

(d). "Shall" and "should" as used in state standards.

(2). Reference to be made by instructor to pertinent standards, with explanation or interpretation as necessary.

(a). Students to enter pertinent notes in the documents as well as mark the standards under discussion for future reference.

(b). Question-answer-discussion between students and instructor during session.

(3). Short oral review and summarization.

IV. Classroom Materials:

A. Reference booklets for classroom distribution to students.

1. Conditions of Participation-Hospitals-Regulations: Federal Health Insurance for the Aged, U. S. Department of Health, Education, and Welfare, Social Security Administration HIR-10(6-67).

2. Standards for Hospitals and Health Facilities: Colorado State Department of Public Health, Hospital Services Section, Denver, 1965.

B. Additional material for distribution to students: Photocopy of "Hospital Survey Report-Medical Record Department," page 7, Form SSH-1537 (2-66).

V. Assignments: No assignment outside of classroom activities.

VI. Summary and Evaluation:

A. Oral summarization will be attempted through student discussion of topic immediately following subject presentation in classroom.

B. The general pre- and post-training session evaluations will be used as the medium for testing knowledge gained on this subject.

VII. Bibliography:

A. Cowen, George C.; Horton, Clarence R.; Lee, Virginia, "The Team Prepares for Medicare in Colorado," Medical Record News, February, 1968.

B. Huffman, Edna K., Manual for Medical Record Librarians, 5th Ed., Physicians' Record Co., 1963.

C. Letourneau, Charles U., M. D., "Medicare and the Record Librarian," Hospital Management, January, February, March, 1968.

D. Porterfield, John D., M. D., "Attaining Medicare and Pursuing Higher Standards," Medical Record News, October, 1966.

E. Conditions of Participation-Extended Care Facilities, U. S. Department of Health, Education, and Welfare, Social Security Administration, HIR-11(2-68).

F. Conditions of Participation-Hospitals-Regulations, U. S. Department of Health, Education, and Welfare, Social Security Administration, HIR-10(6-67).

G. Standards for Hospitals and Health Facilities, Colorado State Department of Public Health, Hospital Services Section, Denver, 1965.

MEDICARE SURVEYS, CERTIFICATION, AND STATE LICENSURE

I. Organization of Public Health Department.

A. Seven Divisions, one of which is Division of Hospitals and Nursing Homes.

B. Structure of Division of Hospitals and Nursing Homes.

1. Construction Branch @ Hill-Burton.

2. Licensure and Evaluation Branch.

3. Until recently had a Facility Planning Branch.

II. Authority for Licensing.

A. Colorado Revised Statute of 1953 and the Colorado Sessions Laws of 1954.

1. State Department of Public Health given authority to:

a. License.

b. Establish and enforce standards.

B. Powers and Duties of State Board of Health.

C. Powers and Duties of Division of Hospitals and Nursing Homes.

D. Powers of local authority.

III. Classification of Health Establishments.

A. Hospitals.

B. Nursing Homes.

C. Other.

1. Home for Aged.

2. Maternity Home.

3. Tuberculosis Home.

4. Convalescent Center.

5. Basic Nursing Home.

IV. Licensing Procedures.

A. Application.

B. Scheduling of Survey.

C. Composition of Survey Team.

D. Processing of Report.

E. Issuance of License.

V. Validity of License.

A. Period involved.

B. Requirement for retention.

C. Termination of license.

VI. Survey Procedure.

A. Areas covered.

VII. Certification Procedures.

A. Introduction.

1. Facilities.

a. ECF.

b. Hospital.

2. Designation of State Agency.

B. Conditions of Participation.

1. Preparing agencies.

2. Statutory requirement.

3. Method of application.

C. Formal Survey.

D. Notification of acceptance.

VIII. Conclusion.

A. Relationship to Medical Records.

B. Elevation of Patient Care Standards.

CONDITIONS OF PARTICIPATION

HOSPITALS

FEDERAL HEALTH INSURANCE FOR THE AGED

For ready reference for medical record clerks, the following passages should be marked in the U. S. Department of Health, Education and Welfare pamphlet number HIR-10 (6/67) titled "Conditions of Participation - Hospitals."

405.1001 General. (Excerpts from Section 1861 (e) of the Social Security Act.)

"(e) The term "hospital" (except for purposes of section 1814 (d), subsection (a) (2) of this section, paragraph (7) of this subsection, and subsections (i) and (n) of this section means an institution which--

(1) is primarily engaged in providing, by or under the supervision of physicians, to inpatients, (a) diagnostic services and therapeutic services for medical diagnosis, treatment, and care of injured, disabled, or sick persons, or (b) rehabilitation services for the rehabilitation of injured, disabled, or sick persons;

(2) maintains clinical records on all patients;

(3) has bylaws in effect with respect to its staff of physicians;

(4) has a requirement that every patient must be under the care of a physician;

(5) provides 24-hour nursing service rendered or supervised by a registered professional nurse, and has a licensed practical nurse or registered professional nurse on duty at all times;

(6) has in effect a hospital utilization review plan which meets the requirements of subsection (k);

(7) in the case of an institution in any State which State or applicable law provides for the licensing of hospitals, (a) is licensed pursuant to such law or (b) is approved, by the agency of such State or locality responsible for licensing hospitals, as meeting the standards established for such licensing; and

(8) meets such other requirements as the Secretary finds necessary in the interest of the health and safety of individuals who are furnished services in the institution, except that such other requirements may not be higher than the comparable requirements prescribed for the accreditation of hospitals by the Joint Commission on Accreditation of Hospitals (subject to the second sentence of sec. 1863)."

405.1023 Condition of Participation-Medical Staff.
(b) Standard; Autopsies.
(2)
(c) Standard; Consultations.
(3)
(5) (It has been noted in surveys many hospitals are including all these areas as consultations.)

(i) Standards; Bylaws.
(2) (To be noted for purposes of information only in following areas:)
(vii)
(viii)
(ix)
(x)
(xi)
(xii)

Medical record librarians should be thoroughly informed on the following Standard since there is a direct relationship with this committee:
(n) Standard: Medical Records Committee.
(1)
(2)
(3)
(4)
(5)
(6)
(i)
(ii)
(iii)
(iv)
(p) Standard; Meetings.
(2)
(3)
(i)
(ii)

405.1024 Condition of Participation-Nursing Department (for information only).
(g) Standard; Evaluation and Review of Nursing Care.
(4)
(6)

405.1024 Condition of Participation-Dietary Department (for information only).
(c) Standard; Diets.
(1)
(4)

Medical record librarians should become thoroughly familiar with the following section since this does become the area of her (his) responsibility.

405.1026 Condition of Participation-Medical Record Department.

The following Standards are those which become administrative responsibilities:
(a) Standard; Record Maintained. (This is a statutory requirement--the Standard must be met in order for the facility to become certified.)
(1)
(2)
(3)

(b) Standard; Preservation. (It should be noted that State Standards state that "medical records shall be preserved permanently.")
(c) Standard; Personnel. (It is in this area that acquiring knowledge and becoming an accredited medical record technician becomes important, and where each student can become valuable to her hospital. The ART still needs consultation or guidance from an RMRL, however, but far less than would otherwise be required.)
(d) Standard; Identification; Filing. (Most of the small hospitals without a professional medical record librarian should seek professional guidance in this area.)
(1)
(2)
(3)
(e) Standard; Centralization of Reports.
(1)
(2)
(f) Standard; Indices.
(1)
(2)
(3)
(4)
(5)

The following standards in the remainder of this section become the area of medical staff responsibility.
(g) Standards; Content.
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
(9)
(10)
(11) (Since many hospitals, both large and small, do not understand this, there is an example of a chronological summary form that may be found in the Manual for Medical Librarians, by Edna Huffman.
(h) Standard; Authorship.
(i) Standard; Signature.
(1)
(2)
(3)
(j) Standard; Promptness of Record Completion.
(1) (Current records has reference to those on patients currently being treated on patient floors.)
(2)
(3)

405.1028 Condition of Participation-Laboratories.
(b) Standard; Clinical Laboratory Examinations.
(2)

(e) Standard; Routine Examinations.
(f) Standard; Laboratory Report.
(2)
(h) Standard; Tissue Examination.
(1) (Note this states "<u>all</u> tissues removed from patients at surgery are macroscopically examined by the pathologist;" this includes tonsils, adenoids, warts, etc.
(i) Standard; Reports of Tissue Examination.
(1)
(2)
(3)

405.1029 Condition of Participation-Radiology Department.
(d) Standard; Signed Reports.
(1)
(2)
(3)

405.1031 Condition of Participation-Complementary Departments.
(a) Standard; Department of Surgery.
(5)
(6)
(8)
(9)
(b) Standard; Department of Anesthesia.
(1)
(i) (If many days have lapsed between admission physical examination and anticipated surgery, a <u>pre-anesthetic</u> physical examination must be done and recorded by physician.)
(ii)
(iii) (These notes are to be recorded by anesthesiologist or nurse anesthetist.)
(2)
(v) (Please note this states 3 to 24 hours <u>after</u> operation.)
(c) Standard; Department of Dentistry and Dental Staff.
(1)
(ii)
(iii)
(2)
(iii) (Must include medical history and physical examination reports.)
(d) Standard; Rehabilitation, Physical Therapy, and Occupational Therapy Department.
(6)
(7) (All notes should carry the signature of person recording information as well as the date on which entries have been made.)

405.1032 Condition of Participation-Outpatient Department.
(d) Standard; Medical Records.
(1)
(2)
(3)

405.1033 Condition of Participation-Emergency Service or Department.
(d) Standard; Medical Records.
(1) (In most hospitals these records are found to be inade-
(2) quate--lacking in information content, and not pro-
(3) perly filed. Too often these are regarded as business
(4) office records, with charges for services to patient
(5) the most complete items of entry on these special records.)

405.1034 Condition of Participation-Social Work Department.
(c) Standard; Records of Social Work Services.
(2)

405.1035 Condition of Participation-Utilization Review Plan.
(a) Condition.
(1)
(2)
(d) Standard; Written Description of Plan.
(4)
(5)
(f) Standard; Reviews.
(1)
(iii)
(2)
(i)
(ii)
(iii)
(g) Standard; Extended Duration Cases.
(4)
(i) Standard; Administrative Staff Responsibilities.
(2)

For those students from psychiatric hospitals the following will apply:

405.1037 Condition of Participation-Special Medical Record Requirements for Psychiatric Hospitals.
(a) Standard; Medical Records.
(1)
(2)
(3)
(4)
(5) (This includes physician orders, operative reports,
(6) special procedures.)
(7)
(8)
(9)
(10)
(11)
(12)

Since there are no students in our class who are affiliated with a hospital caring for tubercular patients, the following is for information only:

405.1039 Condition of Participation-Special Medical Record Requirements for Tuberculosis Hospitals.
(a) Standard; Reports on Laboratory Procedures.
(b) Standard; Records of Case Review Conferences.
(1)
(2)
(3)
(c) Standard; Progress Notes.
(1)
(2)

Very Important Person on a Very Important Program.

Please review:

Condition 405.1035-Standard 1 - factor 2.

> "In order to encourage the most efficient use of available health services and facilities, assistance to the physician in timely planning for posthospital care is initiated as promptly as possible, either by hospital staff, or by arrangement with other agencies. For this purpose, the hospital makes available to the attending physician current information on resources available for continued out-of-hospital care of patients and arranges for prompt transfer of appropriate medical and nursing information in order to assure continuity of care upon discharge of a patient."

Please note the following excerpt from Conditions of Participation for Extended Care Facilities, HIM - 3 (3-66) Section 1861 (1).

> "A hospital and an extended care facility shall be considered to have a transfer agreement in effect if, by reason of a written agreement between them or (in case the two institutions are under common control) by reason of a written undertaking by the person or body which controls them, there is reasonable assurance that;
> (1) Transfer of patients will be effected between the hospital and the extended care facility whenever such transfer is medically appropriate as determined by the attending physician; and
> (2) There will be interchange of medical and other information necessary or useful in the care and treatment of individuals transferred between the institutions, or in determining whether such individuals can be adequately cared for otherwise than in either of such institutions."

A written transfer agreement is a legal, binding document. When a transfer agreement has been made between a hospital and an extended care facility, each facility assumes a legal obligation to transfer medical information to the institution receiving the transferred patient in order to assure continuum patient care. Hospitals are being very lax in meeting this requirement, for it has been found the majority of extended care facilities are operating in quiet desperation in their attempt to obtain some information in order to proceed with intelligent patient care.

Every student in this training program on returning to her hospital could fill a very important function in becoming involved in efforts toward meeting this responsibility. This would indeed make you a very important person, and dedicated to patient care.

What information would the hospital send?

1) Transfer form with immediate information such as diagnoses, medications patient has taken, etc.
2) Copies of medical history and physical examination reports, or
3) A discharge summary containing all of the above information.

STANDARDS FOR HOSPITALS AND HEALTH FACILITIES

For ready reference for medical record clerks, the following passages should be marked in the STANDARDS FOR HOSPITALS AND HEALTH FACILITIES, Colorado State Department of Public Health, Hospital Services Section, Denver, Colorado.

Chapter I - Definitions

Section I - Health Institutions
1.1

Chapter III - General Hospitals

Section 3 - Medical Staff
3.4 Medical Audit (Committee)
3.5 Tissue (Committee)
3.6 Medical Records (Committee)
3.7 Consultations

Section 4 - Medical and Hospital Records
4.1 Facilities
4.2 Preservation
4.3 Personnel
4.4 Entries
4.5 Content (Note 4.5-1: Correction should be made by placing a semicolon as follows: "Sociological Data; Date and Time of Admission and Discharge; Adequate Identification Data; _____"
4.6 Content, Surgical
4.7 Content, Obstetrical
4.8 Content, Newborn
4.9 Hospital Records (There are a few errors in this listing of requirements which should be noted and corrected: 1) "Diagnostic index" and "Operative index" should have addended the following words: "according to Standard Nomenclature or International Classification of Diseases and Operations" and 2) "Patient master card file according to Standard Nomenclature or International Classification of Diseases and Operations." This should read "Patient master card file" with the remainder of the words deleted.

Section 7 - Anesthesia
7.3 Administration

Section 8 - Clinical Pathology
8.6 Responsibilities
8.7 Tissues

Section 9 - Delivery Suite - Nursing
9.10 (Last Sentence)

Section 10 - Dietary Services
10.4 Orders

Section 11 - Emergency and Outpatient Services
11.9 Discharges
11.10 Medical Records (Emergency)
11.18 Medical Records (Outpatient)

Section 15 - Nursery(ies)
15.19 Infant Examination
15.21.8 Physicians Orders

Section 18 - Occupational and Physical Therapy
18.2.4 Treatment Records

Section 19 - Patient Care Unit
19.23 Physician Orders
19.26 Medication Recording

Section 24 - Radiological Services
24.4 Medical Record

EDUCATION AND TRAINING

EDUCATION AND TRAINING

I. Topic: Education and Training.

II. Objective: To acquaint the students with the program and services of the American Association of Medical Record Librarians and with other programs of preparation.

III. Activities and Procedures: Lecture.

IV. References and Materials:

Beard, Margaret, "Changing World of the Medical Librarian," National Center for Audio Tapes, University of Colorado, Boulder.

Membership materials for the Association.

V. Assignments: None.

THE CHANGING WORLD OF THE MEDICAL RECORD LIBRARIAN

I. Changing patterns of medical care and their effect on medical record personnel.

   A. In the future the average American worker will need to be re-educated every seven years to handle his job.

   B. All hospital services are expanding and changing.

   C. The general practitioner in medicine is disappearing and is being replaced by the specialist.

II. Educational opportunities.

   A. Full-time educational programs for:

      1. Medical record librarians.

      2. Medical record technicians.

      3. Nine-month post high school course.

      4. Many junior colleges are offering a program.

      5. There are a few four-year college programs.

      6. A few hospitals offer a post A.B. program.

   B. Adult education programs.

      1. Correspondence education--1600 graduates of this course--must take exam after 25 lessons for accreditation.

      2. Basic institutes offered by organization.

      3. Special subject institutes.

   C. Literature put out by the organization.

      1. Journal.

      2. Newsletter.

      3. Monograpns.

III. Membership in American Association of Medical Record Librarians.

   A. For medical record clerks.

1. Anyone may become an associate member.

2. Regular members are registered medical record librarians.

B. National membership includes state membership.

C. Meetings held both regionally and nationally for members.

1. Provide in-service help.

2. Disseminate up-to-date information.

DATA PROCESSING

DATA PROCESSING

I. Topic: Data Processing.

II. Objective: To introduce the student to the use of computers in data processing.

III. Activities: Lecture, discussion, and film.

IV. Materials:

A. "The Information Machine," IBM Film.

B. The ABC of IBM Punched Card Accounting, IBM handout.

C. Key punching instruction sheet, IBM handout.

V. Assignments: None.

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